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ABSTRACT

Early Childhood Research & Practice (ECRP), a peer-reviewed, Internet-only journal sponsored by the ERIC Clearinghouse on Elementary and Early Childhood Education (ERIC/EECE), covers topics related to the development, care, and education of children from birth to approximately age 8. The journal emphasizes articles reporting on practice-related research and on issues related to practice, parent participation, and policy. Also included are articles and essays that present opinions and reflections. The first part of this issue of ECRP contains the following major articles on research and practice: (1) "Education Matters in the Nurturing of the Beliefs of Preschool Caregivers and Teachers" (Mary Benson McMullen and Kazim Alat); (2) "Changing Curriculum for Early Childhood Education in England" (Young-Ihm Kwon); (3) "The Continuity Framework: A Tool for Building Home, School, and Community Partnerships" (E. Glyn Brown, Carolynn Amwake, Tim Speth, and Catherine Scott-Little); and (4) "Development of a Comprehensive Community Assessment of School Readiness" (David A. Murphey and Catherine E. Burns). The second part presents the following observations and reflections: "Modeling Collaboration, In-Depth Projects, and Cognitive Discourse: A Reggio Emilia and Project Approach Course" (Julie Bullard and Janis R. Bullock). An additional feature article details a project by Ohio kindergartners: "The Apple Project" (Debbie Danyi, Heather Sebest, Amy Thompson, and Lisa Young). The journal concludes with a recent ERIC database search on the training and education of early childhood teachers, and a description of new ERIC/EECE publications and activities along with general information and links related to the journal. (HTH)

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EARLY CHILDHOOD RESEARCH & PRACTICE

an Internet journal on the development, care, and education of young children

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Education Matters in the Nurturing of the Beliefs of Preschool Caregivers and Teachers

Mary Benson McMullen & Kazim Alat
Indiana University

Abstract

This study examined the relationship between educational background and the philosophical orientation of early childhood educators who worked as caregivers and teachers of preschoolers, ages 3 to 6 years, in one midwestern state (Indiana) in the United States. Specifically, the highest level of education attained by the early childhood professionals and their educational background (whether specific to working with young children or not) were compared to their self-reported beliefs about best practice with young children, using developmentally appropriate practices (DAP) as the philosophy for comparison. A comparison of factor analyses from this study and from studies conducted by Charlesworth and colleagues in 1991 and 1993 indicate clear similarities. A significant, positive correlation was found between level of education and self-reported DAP beliefs scores, and results from 2 x 3 ANOVAs of the three factors that emerged from these data indicate that professionals with a bachelor's degree or higher more strongly adopted DAP as a philosophy overall than colleagues with less education, whereas coursework specific to working with young children was found to be significant only in the case of beliefs related to child-initiated learning. Thus, in general, participants with 4 years of college or more, even if in an unrelated field, held stronger DAP beliefs than those with less education, even if that education was directly related to working with young children. The article suggests that more research needs to be done to examine whether a 4-year degree may be most desirable in terms of ensuring better-qualified preschool teachers. The article also discusses the implications of this finding for policy and advocacy in the field of early childhood education.

Introduction

Early childhood education professionals in the United States possess diverse qualifications--a diversity that is considered a distinctive, if not celebrated, feature of the profession (Hyson, 2001; Saluja, Early, & Clifford, 2001; Wise & Leibbrand, 1993). Does this diversity in the background and preparedness of early childhood caregivers and teachers matter? Current research confirms findings from the past two decades that teacher qualifications significantly affect the quality of care and education provided to young children (Bowman, Donovan, & Burns, 2001; Lazar, Darlington, Murray, Royce, & Snipper, 1982; Oden, Schweinhart, & Weikart, 2000; Phillips, Mekos, Scarr, McCartney, & Abbott-Shim, 2000; Schweinhart & Weikart, 1999; Whitebook, Sakai, Gerber, & Howes, 2001) and that higher qualifications in preschool children's caregivers and teachers contribute to more positive short- and long-term outcomes for these children (Kontos & Wilcox-Herzog, 1997, 2001; Whitebook, Howes, & Phillips, 1989).

Despite all of this evidence from research about the importance of the qualifications of the professionals who work with young children, currently, at any given preschool or child care program at any given

location in the United States, we are still likely to find the following extremes in the caregivers and teachers:

- Some have earned college or graduate degrees, while others possess a high school diploma or its equivalent.
- Some have studied early childhood education or child development, while others have not.
- Some have a great deal of experience working with young children, while others do not.

Another aspect of this reality is that preschool caregivers and teachers with or without education beyond high school, with or without specialized coursework or training for working with young children, and with or without experience in the field tend to be compensated similarly and to be recognized as equals among early childhood professionals (see, e.g., Krajec, Bloom, Talan, & Clark, 2001). The diversity of qualifications among early childhood professionals may negatively affect the quality of care and education received by children, the working conditions of professional staff, and the way that early childhood professionals are perceived in our culture.

At the same time that we tolerate such variation in the qualifications of our professional workforce, there is much agreement among early childhood scholars and practitioners about what content knowledge in preservice and inservice training and education is "best" for our caregivers and teachers, at least philosophically. There is general acceptance that preschool curricula and environments built solidly upon the principles of developmentally appropriate practices (DAP) ensure high quality for young children, and thus, currently, the values related to DAP as a philosophy (Bredekamp, 1987; Bredekamp & Copple, 1997) permeate most 2- and 4-year undergraduate early childhood education and child development professional preparation programs in the United States (Dunn & Kontos, 1997). In fact, DAP philosophy is the very foundation upon which the Child Development Associate's (CDA) credentialing courses are built.

Developmentally appropriate practice is not without its critics, however. Whereas some of the profession's leaders such as Charlesworth (1998) assert that, "DAP is for everyone," others argue persuasively that, despite its emphasis on cultural appropriateness, DAP is not "appropriate" for all children in the United States (see, e.g., Cannella, 1997; Swadener & Kessler, 1991; Mallory & New, 1994; O'Brien, 2000). Some of the critics assert, for instance, that multicultural education that relies simply upon the cultural appropriateness described in the 1997 DAP philosophy statement, or even as expanded in so-called DCAP (developmentally and culturally appropriate practices), reinforces stereotyping, does not acknowledge the unique capabilities of individual children, and, ultimately, fails to promote healthy self-identity in children. In particular, the harshest critics of DAP point out that it is a philosophy developed by predominately White, middle- to upper-middle-class people of Western European descent, and that, as such, it favors children from parents within the already privileged classes, thus maintaining their positions of power within U.S. culture.

However, there are no definitive answers and too little evidence to date from the research about how much and what kind of education most fully prepares early childhood educators to work in this field. There have been, however, several notable and theoretically sound efforts to suggest the nature of, and the direction in which we should head, in the restructuring and design of our preservice and inservice professional development programs (see, e.g., Horm-Wingerd & Hyson, 2000).

Thus, admittedly, we still have much to learn and much more to discuss as a field about what teaching beliefs and practices (DAP versus other innovative practices versus more traditional methods, etc.) lead to optimal outcomes for young children, information that would have huge implications for recommended preservice and inservice education of caregivers and teachers. There is, however, another fundamental unknown for teacher educators and all those who prepare or train preservice and inservice teachers: we do not clearly understand the mechanism involved in the adoption of and then the transmission of beliefs about practices into actual classroom behaviors. This process is very complicated and as yet not fully understood (see McMullen, 1997, 1998). We cannot claim with confidence, for instance, that specialized professional development, in which preservice and inservice professionals have been steeped in DAP, ensures that caregivers and teachers will internalize these beliefs, and that their beliefs then become principles upon which they build their practice, design their learning environments, implement curricula,

and assess student learning and development.

We have, however, made progress in identifying many factors that have been found to influence the philosophical beliefs adopted by caregivers and teachers (Buchanan, Burts, Bidner, White, & Charlesworth, 1998; Hao, 2000; McMullen, 1999). Educational background is one such mediator of beliefs in early childhood that has been identified in the research and should be studied more closely because it can influence policy, teacher education reform, and advocacy initiatives. Educational background, in this context, refers to both the level of overall education and the type of coursework or content covered during that education. Some studies in the literature conclude that the overall level of education attained is the most significant educational background factor in the adoption of a DAP philosophy (Kontos & Wilcox-Herzog, 2001; Morgan et al., 1994). In other studies, it is not the level but the type of education that matters most (see, e.g., Cassidy, Buell, Pugh-Hoese, & Russell, 1995); teachers who have taken coursework or engaged in training specific to the acquisition of the knowledge and skills believed to be connected to working effectively with young children have been found to engage in more behaviors associated with a DAP philosophy (Howes, 1983; Scarr, Eisenberg, & Deater-Deckard, 1994; Snider & Fu, 1990).

In this study, the researchers examined the relationship between educational background and the philosophical orientation of early childhood educators who worked as caregivers and teachers of preschoolers, ages 3 to 6 years, in one midwestern state in the United States. Specifically, the highest level of education attained and the type of educational preparation (whether specific to working with young children or not) were compared to self-reported beliefs about practice, using developmentally appropriate practices (DAP) as the philosophy for comparison. For the purpose of this study, the term "beliefs" was operationally defined to refer to the self-reported working philosophies or theories of practice held by the practitioners whom the researchers examined; these beliefs were examined as they related to statements generated from the original DAP position paper (Bredekamp, 1987). The hypothesis tested was that the self-reported beliefs of early childhood education (ECE) practitioners are different in terms of the level of overall education achieved and the type of educational preparation that they have had.

Method

Sample

Participants were 151 early childhood caregivers and teachers who worked with 3- to 6-year-old children in a variety of early childhood settings, including family child care homes, child care centers, Head Start centers, registered ministries connected with churches and synagogues, preschools connected to elementary school programs, and Montessori preschool programs. The participants had worked in the field for an average of 8.34 years (SD = 7.88; range ≤ 1 to 40 years). In terms of experience in ECE settings, 55 (36.4%) were in the early years of their careers (0 to 3 years), 76 (50.3%) were in the middle years of their careers (4 to 14 years), and 20 (13.2%) were in the later years of their careers (more than 15 years).

As can be seen in Table 1, for statistical purposes, the sample was divided into three categories based upon whether participants' highest level of education was, as follows: a high school diploma, GED, or CDA; a bachelor's degree; or a graduate degree. Twenty-nine percent of the participants had achieved the lowest level of education, 29% had four years of college, and 32% had graduate degrees.

The participants in this study all indicated that they spent a significant portion of every workday in the direct, hands-on care or education of young children. Some, however, indicated that they also had part-time administrative duties, for example, as program directors, office managers, or teaching-team leaders.

Table 1
Demographic Characteristics of Participants (N = 151)

Specialized Educational Preparation

	ECE		Non-ECE		Total	
Highest Degree	*n*	%	*n*	%	*n*	%
HS/GED/CDA/Associate's degree	30	19.9%	14	9.3%	44	29.1%
Bachelor's degree	17	11.3%	31	20.5%	48	31.8%
Graduate degree	28	18.5%	31	20.5%	59	39.1%
Total	75	49.7%	76	50.3%	151	100%

Measures

The questionnaire packet sent to each respondent included a demographic survey from which data were gathered on each respondent's current position (age group of the children with whom they work, job title, whether they do any administrative work in addition to teaching, etc.), highest level of education achieved, type of coursework in their educational background, years of experience, and the context of their work setting (type of setting and program, whether full- or part-time, public or private, etc.). The questionnaire also included the Teacher Belief Scale (TBS) developed by Charlesworth et al. (1991), used in this study to measure the strength of the adoption of developmentally appropriate practices (DAP) as a philosophy of practice in the care and education of young children. The TBS is a widely used and popular instrument with early childhood researchers. The TBS is based upon DAP as outlined in the first National Association for the Education of Young Children (NAEYC) policy statement (Bredekamp, 1987), a statement that is familiar to most readers of this journal. The validity of the instrument was established by Charlesworth et al. (1991; 1993) in a series of observational studies used to confirm practitioners' responses to factors that were identified using the TBS. High congruence was found between the factors and classroom observation in 3 out of 4 teachers examined in the 1991 study and 19 out of 20 teachers examined in the 1993 study. This factorial validity of the TBS was assessed using factor analysis and correlational analysis in which the relationship between practitioners' perceptions of their own beliefs and actual, observable practices was explored. [See Charlesworth et al. (1991; 1993) for more complete information on the validity testing.]

Each TBS item is a statement that the respondent rates on a 5-point Likert scale from "Not Important at All" (ranked as 1) to "Extremely Important" (ranked as 5). Specifically, respondents were asked to indicate how important they believed the practice described in each statement was to them in terms of their own caregiving and teaching of 3- to 6-year-old children. For example, in response to item #22, "It is ____ for children to be instructed in recognizing the single letters of the alphabet, isolated from words," the respondents indicated whether they thought this statement was "Not at All Important," "Quite Unimportant," "Fairly Important," "Very Important," or "Extremely Important."

Procedures

The 151 preschool caregivers and teachers in this study were a subsample of a larger group of 440 early childhood professionals; the remaining 289 members of the complete sample included kindergarten teachers, infant/toddler caregivers, full-time administrators, college instructors, consultants, and students studying early childhood or child development, all of whom identified themselves as early childhood professionals. The population groups targeted for this study were those preschool caregivers and teachers (practitioners who worked daily, directly with children ages 3 to 6 years) who were members of or who attended the professional development activities provided by the state's predominant early childhood professional organization, the Indiana Association for the Education of Young Children (IAEYC). The IAEYC is an affiliate group of the national organization that published the DAP policy statement(s) upon which the research questionnaire was based; therefore, it was anticipated that the sample would be skewed toward a stronger DAP orientation compared with the general population of all preschool caregivers and teachers in the state.

The complete sample was solicited in two ways: (1) through a mailing of 500 questionnaires to randomly selected members of the IAEYC (73% return rate) and (2) two months later, through insertion of the survey instrument packet in 500 randomly selected program guides out of 3000 total that were distributed

on-site at the organization's annual state early childhood professional development conference (15% return rate). Conferees who received a questionnaire in their conference materials were strongly cautioned not to complete a survey if they had already done so as part of the recent random mailing to the professional membership.

Results

Before comparing groups based upon the independent variables, the researchers tried to determine if there was a relationship among all of the variables of study. As shown in Table 2, Pearson correlation analysis was performed to determine whether there were any significant relationships among the study variables--specialized educational preparation, highest degree attained, and the overall level of adoption of developmentally appropriate practices as a philosophical belief in caregiving and teaching (total DAP scores on the TBS). Results from the correlation analysis reveal a significant correlation between highest degree obtained and DAP scores ($r = .39$, $N = 151$, $p < .001$).

Table 2
Intercorrelations for Scores on Specialized Educational Preparation, Highest Degree, and Total TBS Scores
(Strength of Self-Reported DAP Beliefs)

	1. Specialized educational preparation	2. Highest degree	3. Total TBS scores (DAP beliefs)
1. Specialized educational preparation	-		
2. Highest degree	.15	-	
3. Total TBS scores (DAP beliefs)	-.08	.39*	-

*$p < .01$.

Differences between Groups

Data were analyzed using 2 x 3 (Specialized Educational Preparation x Highest Degree) two-way between subjects ANOVA. Prior to conducting the ANOVA, homogeneity of variances was tested because of the unequal n in each cell. Levene's test revealed that the equal variances assumption of the ANOVA was not met ($F(5,145) = 7.86$, $p < .001$). Therefore, dependent variable scores (i.e., self-reported belief scores) were square-root transformed before the ANOVA was performed. Results indicated that there were significant main effects for specialized educational preparation ($F(1,145) = 4.32$, $p < .05$) and highest educational degree ($F(2,145) = 15.62$, $p < .001$) on overall DAP scores from the TBS instrument. There was no significant interaction effect between the educational background and the highest degree attained on the DAP scores ($F(2,145) = 1.58$, ns).

The first effect shows that specialized educational preparation had a significant effect on participants' self-reported DAP beliefs. Although this effect was found to be significant, the effect was relatively weak ($p = .044$, $\eta^2 = .28$). For further investigation, we compared two educational preparation background groups (those with specialized educational preparation in ECE vs. non-ECE) using a t-test. Results indicated that there was no significant difference between the two groups in terms of mean scores. However, teachers with ECE backgrounds had relatively higher DAP scores ($M = 163.43$, $SD = 12.38$) than teachers with non-ECE backgrounds ($M = 161.22$, $SD = 13.41$).

The second effect indicates that there was a difference in DAP scores that was significantly related to participants' highest educational degree. As shown in Table 3, three educational attainment levels were tested: Level 1. High School/GED/CDA/Associate's Degree; Level 2. Bachelor's Degree; and Level 3. Graduate Degree. The post-hoc analysis showed that teachers with less education had significantly lower

DAP scores (M = 154.41, SD = 15.78) than teachers with bachelor's degrees (M = 163.52, SD = 10.35) and graduate degrees (M = 167.24, SD = 11.00). Means and standard deviations for total TBS scores can be seen in Table 3.

Table 3
Means and Standard Deviations for Total TBS Scores

	Specialized Educational Preparation						Total		
	ECE			Non-ECE					
Highest Degree	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
HS/GED/CDA/Associate's degree	30	156.07	13.10	14	150.86	20.53	44	154.41	15.78
Bachelor's degree	17	163.12	10.11	31	163.74	10.63	48	163.52	10.34
Graduate degree	28	171.50	6.90	31	163.39	12.59	59	167.24	11.00

Factor Analysis of the Teacher Beliefs Scale

The results for the analysis of the TBS instrument of DAP scores showed means for the items that ranged from 3.42 to 4.93 (average SD = .35). Initial analysis revealed seven factors, which explained 58.18% of the variance. Because the last three items loaded with only one item each and with relatively high item loadings (.84, .80, -.68, respectively), these items were removed from further analyses. The principal components analysis revealed four factors with eigenvalues greater than 1, accounting for 47.72% of the item variance, which, when rotated (varimax) to simple structure, yielded moderate to high item loadings (ranging from .38 to .78) on the designated factors. Of these factors, Factor IV, composed of only two items, was removed after reliability testing because of its relatively low alpha (.30). The factors that remained were named as follows: Factor I. Teacher-Directed/Teacher-Controlled Activities and Materials; Factor II. Child/Individual-Initiated Learning; and Factor III. Child-Centered Literacy Activities. Factor reliability was assessed by Cronbach's alpha. Moderate levels of internal consistency were obtained from items comprising these three factors (.87, .87, and .73, respectively).

Factor structure and related statistics can be seen in Table 4. Table 5 displays a comparison of the factor analysis results from this study with those obtained by Charlesworth et al. (1991; 1993). Although factor names differ across the studies, factor content is nearly identical; that is, Factor I (Teacher-Directed/Teacher-Control) in this study is almost a combination of Factor II and Factor IV in Charlesworth et al. (1991) and Factor I and VI in Charlesworth et al. (1993).

Table 4
Factor Structure, Eigenvalues, Cronbach's Alpha, Means, and Standard Deviation for the Teacher Beliefs Scale

	Teacher-Directed/ Teacher-Control	Child/Individual-Initiated Learning	Child-Centered Literacy Activities	Item	
	I	II	III	*M*	*SD*
I. Teacher-Directed/Teacher-Control					
13 (Workbooks & ditto sheets)	.78			4.80	.55
15 (Basal reader)	.78			4.54	.95
14 (Flash cards)	.76			4.43	1.00
3 (Evaluation by workbooks)	.73			4.73	.63
23 (Letters on lines)	.70			4.69	.70
16 (Whole group activity)	.66			4.26	1.05
1 (Standardized group tests)	.64			4.49	.95

10 (Working silently and alone)	.61			4.71	.69
21 (Letters of the alphabet)	.56			3.87	1.32
19 (Punishment)	.55			4.37	.83
22 (Colors in lines)	.54			4.62	.78
31 (Kindergarten reading emphasis)	.53			3.77	1.60
18 (Teacher authority)	.44			4.03	1.20
II. Child/Individual-Initiated Learning					
8 (Teacher-selected activities)		.77		4.69	.68
4 (Individual differences in interests)		.76		4.58	.72
5 (Individual differences in development)		.72		4.74	.57
11 (Active exploration)		.70		4.88	.41
12 (Learning through interaction)		.63		4.77	.54
30 (Social skills)		.62		4.86	.44
28 (Child/adult interaction)		.60		4.68	.64
7 (Self esteem)		.57		4.78	.58
9 (Child selection of activities)		.54		4.39	.90
33 (Experiences spread over time)		.48		4.67	.57
2 (Observation)		.46		4.75	.52
17 (Teacher as facilitator)		.46		4.62	.80
III. Child-Centered Literacy Activities					
25 (Child dictates story)			.69	4.13	1.12
26 (Functional print)			.68	4.23	1.13
29 (Invented spelling)			.66	4.21	1.19
32 (Integrated curriculum/math)			.58	4.50	.79
6 (Curriculum as separate subjects)			.42	4.63	.85
27 (Dramatic play)			.38	4.78	.49
Eigenvalue	8.64	4.71	1.96		
Cronbach's alpha (Whole Scale: .87)	.87	.87	.73		

Table 5
Comparison of Three Studies' Factor Structure for the Teacher Beliefs Scale*

Current Study	Charlesworth et al., 1991	Charlesworth et al., 1993
I. Teacher-Directed/Teacher-Control	II. Developmentally Inappropriate	I. Inappropriate Activities & Materials
Workbooks & ditto sheets ○	Workbooks ○	Basal ○
Basal reader ○	Evaluation by workbooks ○	Workbooks/ditto sheets ○
Flash cards ○	Alphabet ○	Flash cards ○
Evaluation by workbooks ○	Flash cards ○	Print letters ○
Letters on lines ○	Punishment ○	Evaluation by workbooks & worksheets ○
Whole group activity ○	Whole group activity ○	Reading ○
Standardized group tests ○	Reasons for rules ** □	Seatwork ○
Working silently and alone ○		Recognizing alphabet ○
Letters of the alphabet ○	IV. Inappropriate Literacy Activities	Whole group ○
Punishment ○	Letters on lines ○	Color within lines ○
Colors in lines ○	Colors in lines ○	Selects own activity □
Kindergarten reading emphasis ○	Standardized tests ○	

Teacher authority ○

II. Child/Individual-Initiated Learning
Teacher-selected activities □
Individual differences in interests □
Individual differences in development □
Active exploration □
Learning through interaction □
Social skills □
Child/adult interaction □
Self-esteem □
Child selection of activities □
Experiences spread over time □
Observation □
Teacher as facilitator □

III. Child-Centered Literacy Activities
Child dictates story ●
Functional print ●
Invented spelling ●
Integrated curriculum/math ●
Curriculum as separate subjects ●
Dramatic play ●

Kindergarten reading emphasis ○

III. Appropriate Positive Teacher/Child Relationship
Child/adult interaction □
Teacher as facilitator □
Self-esteem □
Reading stories **

I. Developmentally Appropriate
Individual interests □
Developmental differences □
Active exploration □
Child selection of activities □
Active plan/participation □
Evaluation of observation □
Social skills □
Child dictates story ●
Invented spelling ●
Dramatic play ●
Functional print ●

VI. Inappropriate Structure
Evaluation through standardized tests ○
Curriculum as separate subjects □

III. Appropriate Individualization
Individual differences in development □
Individual differences in interests □
Active exploration □

V. Appropriate Integrated Curriculum Beliefs
Health & safety □
Teacher as facilitator □
Multicultural & nonsexist **
Integrated math ●

II. Appropriate Social
Talks informally with adults □
Social skills with peers □
Dramatic play ●
Dictates stories ●

IV. Appropriate Literacy Activities
See & use functional print ●
Use of invented spelling ●

*Legend: blue = Factor I [○], yellow = Factor II [□], green = Factor III [●] in this study.
**Items that do not fall under any factor in this study.

Differences across the Factors

To test whether there was a difference in this study among scores of Factor I, Factor II, and Factor III in terms of specialized educational preparation and highest degree attained, 2 x 3 two-way between subjects ANOVA was performed. Prior to analysis, Levene's test was used to assess the homogeneity of variances. Because results showed that the groups were not equal in terms of variances ($F(5,145) = 6.71$, $p < .001$), a square root transformation was performed for total factor scores. For Factor I, results indicated that there was a significant main effect of highest degree ($F(2,145) = 12.41$, $p < .001$) on Factor I scores; that is, ECE professionals with graduate degrees expressed higher DAP beliefs ($M = 60.58$, $SD = 5.47$) than professionals with bachelor's degrees ($M = 57.52$, $SD = 6.60$) and professionals with HS/GED/CDA/associate's degrees ($M = 52.89$, $SD = 10.34$).

In the second analysis, ANOVA results showed significant main effects for both specialized educational preparation and highest degree obtained on Factor II scores, ($F(1,145) = 8.48$, $p < .01$; $F(2,145) = 6.54$, $p < .01$, respectively). However, there was no significant interaction effect between specialized educational preparation and highest degree obtained on the Factor II scores ($F(2,145) = 1.65$, *ns*). Post-hoc analysis indicated that caregivers and teachers in the HS/GED/CDA/associate's degree group ($M = 54.75$, $SD = 7.13$) had significantly lower DAP belief scores than teachers with bachelor's degrees ($M = 57.27$, $SD = 2.87$) and graduate degrees ($M = 57.11$, $SD = 3.80$). In terms of specialized educational preparation, practitioners with specialized ECE preparation ($M = 57.30$, $SD = 3.43$) had higher DAP scores than those

without this preparation (M = 55.65, SD = 5.91) on Factor II scores. In the final analysis, there was a significant effect of highest degree ($F(2,145) = 10.15$, $p < .001$) on Factor III scores. Once again, early childhood professionals with graduate degrees expressed stronger DAP beliefs (M = 27.71, SD = 2.90) than professionals with bachelor's degrees (M = 26.92, SD = 3.75) and with HS/GED/CDA/associate's degrees (M = 24.48, SD = 4.09). Means and standard deviations for each factor score are shown in Table 6. ANOVA results for factor total scores are shown in Table 7.

Table 6
Means and Standard Deviations for Factor Total Scores on TBS

		Specialized Educational Preparation								
		ECE			Non-ECE			Total		
	Highest Degree	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Factor I	HS/GED/CDA/Associate's degree	30	53.13	10.02	14	52.34	11.39	44	52.89	10.35
	Bachelor's degree	17	56.65	7.79	31	58.00	5.93	48	57.51	6.60
	Graduate degree	28	61.54	3.37	31	59.71	6.79	59	60.58	5.47
Factor II	HS/GED/CDA/Associate's degree	30	55.81	4.10	14	52.36	11.03	44	54.75	7.13
	Bachelor's degree	17	57.47	2.92	31	57.16	2.89	48	57.27	2.87
	Graduate degree	28	58.75	2.19	31	55.65	4.36	59	57.12	3.81
Factor III	HS/GED/CDA/Associate's degree	30	24.40	4.21	14	24.63	3.97	44	24.48	4.09
	Bachelor's degree	17	27.35	3.32	31	26.68	4.01	48	26.92	3.76
	Graduate degree	28	28.86	2.25	31	26.68	3.05	59	27.71	2.89

Table 7
ANOVA Results for Factor Total Scores on TBS

Source	*df*	*MS*	*F*	η^2
Factor I: Teacher-Directed/Teacher-Control				
Specialized Educational Preparation	1	5.916	.10	.001
Highest Degree	2	719.09	12.54***	.147
Background x Highest Degree	2	32.100	.56	.008
Error	145	57.337		
Factor II. Child/Individual-Initiated Learning				
Specialized Educational Preparation	1	181.70	8.35*	.054
Highest Degree	2	137.08	6.30**	.080
Background x Highest Degree	2	33.46	1.53	.021
Error	145	21.74		
Factor III. Child-Centered Literacy Activities				
Specialized Educational Preparation	1	25.86	2.089	.014
Highest Degree	2	126.15	10.18***	.123
Background x Highest Degree	2	18.13	1.465	.020
Error	145	12.38		

Note: η^2 = effect size. *$p < .05$, **$p < .01$, ***$p < .001$.

Discussion

There are two primary findings from this study. First and foremost, the level of education was found to

matter more in the adoption of a DAP philosophy of practice than specialized educational preparation. In general, the higher the educational level attained, regardless of the major area of study, the stronger the self-reported endorsement of a DAP system of beliefs. Second, although specialized education was found to be related to child-centered learning, it did not relate to beliefs connected with classroom management, assessment, and issues related to literacy content. Specifically, those teachers with less than a bachelor's degree, even those with specialized preparation that was "steeped" in DAP as a philosophy, scored as having significantly weaker beliefs than those with bachelor's degrees, even when those degrees were in areas unrelated to early childhood education or child development.

Despite the strength of the relationship found repeatedly in this study between educational levels and DAP beliefs, and the fact that correlation analysis found no significant link between specialized educational preparation and beliefs, there was more to the story. Specifically, analysis of the three factors that emerged from these data indicated that coursework specific to working with young children was significantly related to beliefs associated with child-initiated learning, the second factor to emerge in the results. Thus, educational background that included coursework or training specific to working in the field of early childhood education did affect the beliefs held by caregivers and teachers on items that dealt with, for instance, (1) children being allowed to select some of their own activities and the importance of active exploration in children's learning, (2) respect for individual differences in interests and developmental level when planning curricula, and (3) the importance of peer collaboration in play and learning activities and how this collaboration contributes to children's social development.

Specialized coursework or training to work with young children did not affect the two other factors that emerged in terms of strength of adoption of a DAP philosophy. These two factors were Teacher-Directed/Teacher-Control and Child-Centered Literacy Activities, and they include items that dealt with beliefs about the following: (1) classroom management and discipline issues; (2) appropriate methods and reasons for assessing young children; (3) the use of didactic learning materials such as flash cards, ditto sheets, and basal readers; (4) the value of integrating content across the curriculum; and (5) issues related to emergent literacy in general, including inventive or developmental spelling, functional print, stories with children, and learning the alphabet.

Teacher preparation programs in general have a very poor record when it comes to influencing change in preservice teachers' beliefs (see Goodman, 1988; McMullen, 1998). Several studies have found that it is particularly difficult to move students toward the acceptance of newer, more innovative philosophies of practice as college students move through their professional teaching preparation programs and begin their careers. Students who graduate from postsecondary teacher preparation programs tend to maintain the beliefs that they had when they entered about what it means to be a "teacher" and how children learn; these strongly held beliefs about teaching and learning are formed in these students during their own pre-K through 12th-grade education experiences (Lortie, 2002). These strongly held beliefs are formed over a very long time and are highly resistant to change. There is evidence, however, that early childhood teacher educators may be more successful in influencing beliefs than their colleagues who prepare teachers to work at other developmental levels. For instance, Wood, Cobb, and Yackel (1990) and McMullen (1997) conclude from their studies that early childhood teacher education that emphasizes DAP as a philosophy along with supervised field experiences in settings with strong mentor caregivers and teachers can influence the adoption of DAP beliefs.

According to the results of this study, however, it may be only certain, very specific beliefs that are influenced by specialized coursework--those being the beliefs more traditionally associated with early childhood and child development and less with schools of education and general teacher preparation. (Recall that in this study, the child-initiated learning factor was associated with specialized education, whereas the teacher-direction/control and literacy activities factors were not.) This finding may not be surprising if one examines what is known about how, traditionally, schools of education differ from other programs that prepare early childhood practitioners, in particular psychology and home economics programs (many of which are now renamed to be departments or schools of child or human development or family studies). Goldstein (1997) discusses how early childhood education was strongly shaped by the laboratory school movement; developmental psychology; and such scholars as Froebel, Piaget, Erikson, Montessori, and Dewey. Early childhood (birth to kindergarten) was historically taught out of departments of home economics or psychology, and only in recent decades has it been common to find early childhood programs also in schools of education. Kindergarten/primary education, which has typically been housed

in education departments (Bloch, 1991), was still influenced by Dewey, of course, but more so by the social efficiency movement (Callahan, 1962) and social reconstructionists (Cremin, 1961). Teacher education departments have traditionally focused more on aspects of classroom management and methods of teaching (i.e., those items included in the factors found to be unrelated to specialized coursework in this study), whereas caregivers and teachers from home economics and psychology traditions have historically been exposed more to the psychological and developmental aspects of caregiving and teaching. This legacy appears to still be an influential factor in our field, and it may explain the findings of this current study in terms of the particular set of beliefs about early childhood education that were adopted by those with specialized educational background.

It is important to consider a possible alternative explanation for the results of this study. In pondering the significant role that educational level had in this sample, a role that mattered more than specialized educational preparation, the researchers returned to the criticisms of DAP as a "one-size-fits-all" philosophy. If we accept that DAP is a construct built upon a largely White, Western European framework, could socioeconomic status (SES) be the root of the difference among the practitioners in this study rather than educational level alone? Consider the factors that the respondents with less education were unable to embrace--factors related to developmentally appropriate guidance and discipline techniques, more holistic forms of assessment, and support for emergent reading and writing; such items relate to beliefs that are traditionally found to differ between lower and middle/upper classes. Although willing to accept child-centeredness philosophically, lower SES practitioners may not believe that the techniques described in the other two factors that emerged in this study are effective or helpful to their children. Such conclusions are beyond the scope of this study but deserve careful attention in future research and debate.

The results of this study lead the researchers to conclude with some certainty that the achievement of a bachelor's degree matters, at least if the goal is increasing the likelihood that a person will adopt a more DAP philosophy of practice. Whether this conclusion is based upon results that are affected by overall level of education alone or from some interplay of a number of complex socioeconomic status variables that include higher education is unknown. However, we can assert that this finding is particularly important when considering preschool teachers and caregivers, a group whose members, as pointed out earlier in this paper, have the widest variance in terms of professional qualifications and whose members come into the field at such a diverse number of entry points. Consideration of the implications of this finding led the researchers to consider the following question: Should all preschool teachers and caregivers be required to have a minimum of a 4-year college degree? Support for a "yes" answer to this question for some of us may come from recent research by Cassidy and Lawrence (2000) who found that early childhood teachers with 4-year versus 2-year degrees were better able to articulate their beliefs concerning their practices with young children and twice as likely to provide "cognitively focused" rationales for their curriculum choices then teachers with less education. Similarly, Doherty, Lero, Goelman, Tougas, and LaGrange (2000) found in their study of Canadian family child care that the highest level of education "in any subject" was directly related to quality in the care providers that they studied. Doherty and her colleagues concluded that, although it is important to provide specific training courses once someone decides to become a professional care provider, it is more important to recruit well-educated individuals to the field to begin with.

The finding that overall level of education, especially the achievement of a bachelor's or graduate degree, influences beliefs in early childhood education should be comforting to those of us who have devoted our lives to postsecondary education. At the same time, the lack of a strong relationship between specialized preparation/coursework in early childhood education and beliefs in all aspects of developmentally appropriate practice (beyond the notion of child-centeredness) may challenge some of us or, at the very least, spur us on to engage in more serious dialogue about what we are accomplishing in our CDA and early childhood education associate's degree programs. Is what we are doing sufficient to ensure a well-qualified professional workforce? Are we focusing enough attention on some of the more traditional educational issues, such as classroom management, literacy, and discipline-specific teaching methodologies?

One must be cautious, however, in over-interpreting the findings from this particular study. This sample was relatively small, at $N = 151$, and it was skewed toward high DAP scores on the TBS; other samples from the United States have shown a more normal distribution using this instrument. The skewed

distribution in this case may be due to the nature of the sampling technique in which participants with bachelor's and graduate degrees were over-represented and all participants were associated with a professional early childhood organization that has a stated policy endorsing developmentally appropriate practices. That being said, because the results of the factor analyses indicate that these data were not significantly different from those found in two large-scale studies by Charlesworth et al. (1991; 1993), the data, although skewed, do deserve careful consideration. It would be important to replicate these findings with a much larger random sample, a sample that should include practitioners both within and outside of the major early childhood education professional organizations. In addition, future research needs to examine the role that ongoing professional development may play as a mediator of practitioners' beliefs about practice. Further, given the possibility of the SES link to self-reported beliefs, it would be important to collect data on related variables such as family income levels and minority status, in addition to educational background.

Conclusion

The results of this current study, although inconclusive, lend support to a tentative conclusion that a 4-year college degree is desirable in preschool teachers. Teachers of young children, first and foremost, need depth and breadth of education and experience, exposure to a world of ideas and perspectives, along with the skills to communicate and express their knowledge fluidly--the type of knowledge, skills, and stimulation acquired most handily through a 4-year degree program. Although the data in this study do not show a strong relationship between specialized education of preservice or inservice caregivers and early childhood education beliefs, it is important to note that other recent studies, such as that of Hao (2000), do more convincingly connect the content of early childhood teacher training to both DAP beliefs and practices. Indeed, there is consensus in the field among some of our most prominent scholars that to become fully qualified as early childhood educators, caregivers and teachers need to acquire the knowledge and skills related specifically to early childhood education and child development (see Horm-Wingerd & Hyson, 2000).

Overall, this study leads the researchers to assert that the knowledge and skills that are more likely to lead to the provision of high-quality early care and education may more readily be present in well-educated individuals, those with 4-year degrees. Thus, the researchers encourage other scholars, policy makers, and teacher-educators to engage in dialogue and to conduct more studies in which they examine the question, "What educational background is recommended to increase the likelihood that caregivers and teachers will develop the knowledge, skills, and philosophies of practice identified by research as important in delivering the highest quality care and education to our young children?"

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Changing Curriculum for Early Childhood Education in England

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Abstract

This article examines early childhood curriculum in England. Traditional early childhood education in England has been child centered, in contrast to approaches that are subject centered and teacher directed, emphasizing individual children's interests, free play, firsthand experience, and integrated learning. However, recently, the government introduced a framework for an early years curriculum, redefined the child-centered educational model, and initiated reforms for raising standards. In order to identify the nature of early childhood curriculum in England, this article examines the historical development and philosophical underpinnings of early childhood education, including recent developments. The article then investigates and describes the early childhood curriculum in England today.

Introduction

This article examines early childhood curriculum in England. Historically, in England, there was little government intervention in preschool provision, in curriculum, and in curriculum implementation. Recently, in order to raise standards and improve the quality of early childhood institutions, government intervention in early years education has increased significantly. In 1996, the government introduced a framework for an early years curriculum: *Desirable Outcomes for Children's Learning on Entering Compulsory Education* (SCAA, 1996), recently revised as *Early Learning Goals* (QCA, 2000). This framework is very goal oriented and specifies a large number of learning goals to be achieved by children.

With respect to the appropriateness of the early years curriculum, there is an ongoing debate between the policy makers, who emphasize school effectiveness, and the early childhood specialists, who focus on a developmentally appropriate curriculum. Chris Woodhead, Chief Inspector of Schools, argued that adults working with 3- and 4-year-old children need to use a formal approach and direct teaching: "Direct teaching is crucial at this age as it is at every other age" (Woodhead, 1999, p. 10). On the other hand, many early childhood specialists have expressed concern that the government policy of raising standards may lead to over-concentration on formal teaching and upon the attainment of specific learning targets (see, e.g., Drury, Miller, & Campbell, 2000; Anning, 1998).

The purpose of this article is to identify the nature of early childhood curriculum in England. First, the article examines the historical development and philosophical underpinnings of early childhood education, including recent developments. The article then investigates and describes the early childhood curriculum in England today.

Historical Development of Early Childhood Education in England

Early History of Early Childhood Education

Early childhood care and education for young children began to emerge in England in the late 18th century on a voluntary and philanthropic basis. In 1816, the first nursery school in the United Kingdom was established at New Lanark in Scotland by Robert Owen (1771-1858) for the children of cotton mill workers. Children ages 1 to 6 were cared for while their parents and older siblings worked in the cotton mills. Owen advocated free and unstructured play in the education of young children and did not press for formal training. He endeavored to create a future citizen through the process of informal teaching and physical activities. Although Owen's ideas were ahead of his time, his example stimulated a significant interest in early childhood education and the founding of a number of infant schools in Britain.

Passage of the Education Act of 1870 was an important event because the act established compulsory elementary schools for all children from the age of 5. In 1880, elementary education became compulsory for all children between the ages of 5 and 13. In the absence of special institutions for younger children, elementary schools admitted children younger than 5 years old, to protect them from the poor and unhealthy physical conditions of slum houses and dangerous streets. In 1905, five women inspectors from the Board of Education investigated the admission of infants to elementary schools as well as the curriculum used to instruct them. These inspectors reported the inappropriateness of such provision for these young children and recommended that children under the age of 5 have separate facilities and a different teaching approach from older children (Board of Education, 1905). The inspectors criticized the emphasis on monotonous repetition and rote memorization in the elementary school curriculum. As a consequence of this report, children under 5 were officially excluded from elementary schools.

In 1911, Margaret McMillan (1860-1931) and her sister Rachel established an open-air nursery for poor children in Deptford. McMillan's educational model was inspired by her socialist ideology (Blackstone, 1971). She was concerned for the health and well-being of working-class children, and she stressed the need for health care with proper nourishment, hygiene, exercise, and fresh air. Her nursery allowed free access to play areas and gardens and was not predicated upon a fixed time schedule. McMillan's methods, with her emphasis on fresh air, exercise, and nourishment, still influence some aspects of current English nursery practice (Curtis, 1998)

Recent History of Early Childhood Education

By the 1960s, the decline in family size and the closure of day nurseries after the Second World War had reduced the opportunities for children to play with other children. At the same time, awareness of the educational value of play may have become more widespread. It was impossible for Local Education Authorities (LEAs) to increase the number of nurseries, because the Ministry of Education Circular 8/60 stated that there could be no expansion of nursery school provision (Cleave & Jowett, 1982). During this period, the lack of LEA provision of nursery places and growing parental interest in young children's welfare and education created a new type of preschool provision: playgroups. The origin of the playgroup movement is linked to Belle Tutaev, a London mother, who in 1961 organized a nursery group for her small daughter in a church hall, sharing the tasks of child care with a neighbor. The educational authorities welcomed the playgroup movement as a low-cost substitute for nursery schools.

In 1972, Margaret Thatcher, as Secretary of State for Education, presented a White Paper on education titled "Education: A Framework for Expansion" (Department of Education and Science, 1972). The White Paper proposed that nursery education be provided for all who wanted it, saying that by 1980 there would be nursery school places for 50% of 3-year-olds and 90% of 4-year-olds. However, this promised nursery expansion was not forthcoming because of the economic recession. Throughout the 1970s and 1980s, nonstatutory preschool provision was neglected and undeveloped.

Recent Developments

The Rumbold Report *Starting with Quality* (DES, 1990) and the Royal Society of Arts Report *Start Right* (Ball, 1994) both stressed the importance of quality in early years education. The Rumbold report recommended a curriculum based on eight main areas of learning, following in the footsteps of a recent HMI (Her Majesty's Inspectorate) publication *The Curriculum from 5 to 16* (DES, 1985): (1) aesthetic and creative, (2) human and social, (3) language and literacy, (4) mathematics, (5) physical, (6) science, (7) spiritual and moral, and (8) technology (DES, 1990). The Royal Society of Arts Report (Ball, 1994) recommended that high-quality provision be made available to all 3- and 4-year-olds, reviewing evidence that high-quality early education leads to lasting cognitive and social benefits in children. Ball set out the following major prerequisites for "high-quality" provision: an appropriate early learning curriculum; the selection, training, and continuity of staff; high staff:children ratios; buildings and equipment designed for early learning; and a partnership role for parents.

In 1996, the Conservative government introduced the first stage of a Nursery Voucher scheme linked to a set of guidelines for prestatutory settings: *Desirable Outcomes for Children's Learning on Entering Compulsory Education* (SCAA, 1996). Since the introduction of the Voucher scheme and *Desirable Outcomes,* early childhood education has become an issue on the national policy agenda, and there have been significant changes in the practices and politics of early childhood education. The Voucher scheme allowed parents to use vouchers worth up to £1,100 per child for up to three terms of part-time education for their 4-year-old children, in any form of preschool provision. In order to register for the receipt of vouchers, preschool provisions had to show that they were moving children towards the *Desirable Outcomes* as defined by the School Curriculum and Assessment Authority (SCAA, 1996). The *Desirable Outcomes* are "learning goals" that children should achieve before they enter compulsory education. They emphasize early literacy, numeracy, and the development of personal and social skills, and they contribute to children's knowledge, understanding, and skills in other areas.

However, in 1997, the incoming Labour Government abolished the voucher scheme and made its own plans for the development of early years services. The new government tried to raise standards and significantly increased public funding of early years education. The government provided direct funding to preschool institutions for part-time places for 4-year-old children and an increasing number of part-time places for 3-year-old children. However, the receipt of this funding for 3- and 4-year-old children is dependent on each preschool provision meeting government requirements for the regular inspection of preschool settings, in terms of the framework of *Desirable Outcomes,* now revised as *Early Learning Goals* (QCA, 2000).

The Philosophical Background of Childhood Education in England

The main principles of traditional early childhood education in Britain are child centered, in contrast to the traditional subject-centered and teacher-directed approaches of secondary education (Bruce, 1987). This section examines the key underlying principles of English traditional early childhood education: individualism, free play, developmentalism, and the child-centered perspective of the adult educator.

Individualism

Western child-centered education is based on individual children's needs and interests, and on educators' respect for the differences between individual children. Dewey (1959) emphasized individuality, with the curriculum chosen by the child rather than imposed by the teacher. Montessori (1972) had great respect for the child as an individual and for children's spontaneous and independent learning. She believed that the child possesses an intrinsic motivation toward the self-construction of learning. Supporting the view that children are innately curious and display exploratory behavior quite independent of adult intervention, the Plowden Report (CACE, 1967, p. 17) says, "The child appears to have a strong drive, which shows itself at a very early age, toward activity and the exploration of the environment.... As far as can be judged, this behaviour is autonomous since it occurs when there is no obvious motivation such as hunger."

The intrinsic motivation theory of child-centered education relates to the learning by doing theory. In English preschool classrooms, learning by being active and interactive, by exploring the environment, has

gained universal status (Curtis, 1998). Dewey advocated that children learn best by exploring and manipulating their environment. Isaacs (1933) also emphasized the importance of learning by doing. She wrote that play is not the only means by which children come to discover the world; the whole of their spontaneous activity creates their psychic equilibrium in the early years. This learning by doing theory has been accepted implicitly by English preschool teachers, together with the need to provide a free and spontaneous environment and the rejection of formal instruction.

The child-centered view of the child's intrinsic motivation for learning has been widely criticized. The child-centered view is that children are innately curious and keen to find things out, with a strong drive to explore the environment. This theory suggests that children learn more effectively if their activities are self-chosen and self-directed. However, many educators have warned of the dangers of an exclusive and unrealistic emphasis upon the child. Galton (1987) criticized child-centered theory as a "romantic" view of childhood requiring a curriculum totally dictated by the child's interests. Kogan (1987) questions whether children have a natural intellectual curiosity and whether they are really motivated to learn and are keen on discovery. He says that many children in the classroom do not display eagerness to learn and are not able to achieve enough by learning through discovery. Blenkin and Kelly (1987) also criticize learning by discovery, claiming that discovery is not possible unless one knows what one is discovering. They recommend that "the only sensible concept of learning by discovery is one which recognizes the essential contribution of the guidance that the teacher can and should provide" (p. 58).

Free Play

In the English preschool, play is an integral part of the curriculum, founded on the belief that children learn through self-initiated free play in an exploratory environment (Hurst, 1997; Curtis, 1998). Free play is especially the norm in the traditional English nursery curriculum, following Rousseau, Froebel, Owen, McMillan, and Isaacs. According to Froebel, play is "the work of the child" and a part of "the educational process." The Plowden Report (CACE, 1967) suggests that play is the principal means of learning in early childhood. "In play, children gradually develop concepts of causal relationships, the power to discriminate, to make judgements, to analyze and synthesize, to imagine and formulate" (p. 193).

Traditional English nurseries have worked with an integrated early childhood curriculum. The integrated curriculum is, as New (1992, p. 289) said, "the blending of content areas into thematic or problem-focused units of study and a child-centered approach to learning and instruction." Dewey (1959) advocated an integrated early childhood curriculum instead of a subject-divided curriculum. He argued that young children do not think in subjects and that their learning is holistic. According to the guidelines of the Early Years Curriculum Group (1989), "Learning is holistic and for the young child; it is not compartmentalised under subject headings" (p. 3). In traditional English preschools, the rigid, subject-divided curriculum is rejected; instead, free play is regarded as the integrating mechanism that brings together everything learned (Bruce, 1987).

Although free play has many benefits and is a necessary part of preschool classrooms, the early years program that prioritizes free play has several crucial weaknesses. First, much research evidence shows that free play does not maximize cognitive development. Sylva, Roy, and McIntyre (1980) investigated the ways in which both children and adults spend their time during free play sessions in preschools. They found that there was a lack of challenging activity in children's free play, which tended to involve simple repetitive activities. Meadows and Cashdan (1988) also investigated children's behavior during free play sessions and reported that the nursery teachers in their study were busy and kind to the children but not very demanding. During free play, children did not persist at tasks, and the conversation between adult and child was very limited. Meadow and Cashdan argued that supervised free play has limited benefits for children and that a high level of adult-child interaction during play is necessary to optimize children's learning.

Developmentalism

Sequential developmentalism is one of the most influential beliefs in English early years education. The

term refers to the way in which the child passes through a naturally ordered sequence of development towards logical and formal thinking (Curtis, 1998). Piaget's clinical and observational studies developed the idea of readiness and explored the process by which children advance through the sensorimotor stage (0-2 years) and preconceptual stages (2-7 years) in order to progress to logical and abstract thinking. According to this version of developmentalism, a child must be "ready" to move on to the next developmental stage and cannot be forced to move to a higher level of cognitive functioning.

Although developmentalism and readiness are widely reported to be dominant in English early childhood education, several critiques have been articulated about the readiness concept in developmentalism. For instance, Donaldson (1978) challenges Piaget's views of egocentric thinking through a number of fascinating and ingenious experiments and argues that the rational powers of young children have long been underestimated. The idea of "readiness" has often led to a lack of structure in the curriculum and to a lack of progression. In developmental theory, consideration of the nature of knowledge seems to be ignored. According to Bruner (1974), knowledge of child development is necessary but is not sufficient, and early years practice also needs a firm and sufficient knowledge base. He argues that to avoid trivializing education, we need to integrate knowledge about teaching (pedagogical knowledge) with both knowledge about children's development and knowledge about knowledge itself.

The Role of the Adult

The traditional view of the English nursery teacher's role is that he or she is not an expert or authority, but an adviser and facilitator (Curtis, 1998; Darling, 1994). The legacy of not intervening in the child's discovery that comes from Froebel, Montessori, and Dewey remains as a strong force within the ideologies of early childhood educators in England. Montessori (1972) argued that adults must foster children's inner drive, not impair it by imposing too many restrictions and obstacles in the child's environment. Similarly, Dewey (1959) believed that the teacher was not an instructor of passive learners nor a referee in a competition.

The child-centered teacher is a guide and an arranger of the environment, rather than an instructor. Thus, teachers are supposed to select materials and activities that will interest children and enable them to find out about the surrounding world. Peters (1969) explains that "the image of the teacher" presented in the Plowden Report is of a "child-grower" who stands back so that children will proceed from discovery to discovery when they are "ready." However, he says that teaching should not be confined to one approach or method. Peters says that teaching can take the form of instruction and explanation, of asking leading questions, of demonstrating by example, and of correcting attempts at mastery.

Moreover, there is an alternative view that adult support can improve children's concentration and attention span. For example, Vygotsky (1962) stresses the active role of the adult in maximizing children's intellectual development. He contends that children succeed in performing tasks and solving problems when helped by an adult. Bruner (1983) also believes that an adult presence increases the richness and length of play. Bruner describes the adult's role as "scaffolding" a child's learning, putting a scaffold around the child's learning to support the child until the child can operate independently at that level. The above discussion suggests that appropriate intervention and a structured approach to teaching are components of effective preschool practices.

Current Early Childhood Curriculum in England

In 1988, the Education Reform Act for the first time set out a National Curriculum for England and Wales. It presented a comprehensive restructuring of the educational system in England. The most important justifications for the National Curriculum are raising standards in schools and offering a broad and balanced curriculum (Moon, 1994). Before the 1988 Education Reform Act, the education system was decentralized, with little government intervention in curriculum planning and implementation. However, since the introduction of the National Curriculum, government intervention has increased and teachers' autonomy has consequently decreased (Cox, 1996). From its introduction, the subject-based approach of the National Curriculum has been seen as an attack on traditional child-centered preschool education.

Although the National Curriculum applies only to students of compulsory school age, its introduction has inevitably had an effect upon programs for children under statutory school age (Blenkin & Kelly, 1994; Moss & Penn, 1996).

Desirable Outcomes and Early Learning Goals

A further significant change in English early childhood education was the introduction of the framework for early years education represented by the *Desirable Outcomes for Children's Learning* (SCAA, 1996). At that time, raising standards and improving quality in early childhood institutions were public priorities in policy making. The explicit expectation of this SCAA publication was that preschool education programs would enable children to reach the desirable outcomes by compulsory school age (the term after the child's 4th birthday).

In 1999, the Qualifications and Curriculum Authority (QCA, 1999) replaced the *Desirable Outcomes* with *Early Learning Goals*. However, as Table 1 shows, the *Early Learning Goals* (QCA, 1999) do not differ very much from the *Desirable Learning Outcomes* and retain the same six areas of learning. The significant change, in terms of curriculum, is that the *Early Learning Goals* represent what most children are expected to achieve "by the end of the foundation stage (from 3 to the end of the reception year)" instead of "on reaching compulsory school age." The government introduced a Foundation Stage of early learning, which is a new stage of education for children age 3 to the end of their reception year when they will be 5, rising 6. The result is that the previous curriculum intended for 3- and 4-year-olds extends to include 5-year-olds.

Table 1
Learning Areas of Desirable Outcomes and Early Learning Goals*

	Desirable Outcomes (1996)	Early Learning Goals (1999)
Age	**For 3- to 4-year-olds**	**Foundation Stage: From 3 to the end of reception year (5- to 6-year-olds)**
Learning area	1. Personal and social development	1. Personal, social, and emotional development
	2. Language and literacy	2. Communication, language, and literacy
	3. Mathematics	3. Mathematical development
	4. Knowledge and understanding of the world	4. Knowledge and understanding of the world
	5. Physical development	5. Physical development
	6. Creative development	6. Creative development

*Source: SCAA (1996) and QCA (1999).

In 2000, *Curriculum Guidance for the Foundation Stage* was published by the Department for Education and Employment and the Qualifications and Curriculum Authority (QCA, 2000). The curriculum guidance is intended "to help practitioners plan to meet the diverse needs of all children so that most will achieve and some, where appropriate, will go beyond the early learning goals by the end of the foundation

stage" (p. 5). It is notable that although the curriculum guidance claims to describe integrated learning, it also emphasizes literacy and numeracy as distinct curriculum areas. The curriculum guidance sets out the content of each area in three parts: (1) "Stepping Stones," (2) "Examples of What Children Do," and (3) "What Does the Practitioner Need to Do?" The text of the "Stepping Stones" sets out the early learning goals for each area of learning. The examples of "What Children Do" illustrate how children of different ages are progressing. The section "What Does the Practitioner Need to Do?" shows how the practitioner can structure and provide appropriate activities. Table 2 shows one brief extract from the literacy area of the curriculum guidance of the foundation stage.

Table 2
Example of Stepping Stones of Literacy Area in the Curriculum Guidance*

	Stepping Stones
Progression *from age 3* ↓ *To the end of foundation stage (5- to 6-year-olds)*	• Show interest in illustrations and print in books and print in the environment. • Understand the concept of a word. • Begin to recognize some familiar words. • Read a range of familiar and common words and simple sentences independently.

*Source: QCA (2000, pp. 62-63).

Inspection

As part of the recent developments in early childhood education, the government introduced inspection of preschool settings by the Office for Standards in Education (OFSTED). OFSTED is a nonministerial governmental department, independent of the Department of Education and Skills, responsible for inspecting all schools and early years provision receiving government funding in England. The aim of the OFSTED's inspection process is to assure government, parents, and the public that funded nursery education is of acceptable quality (OFSTED, 2001). Every type of preschool setting that wishes to accept government funding is required to undergo an inspection by OFSTED. This inspection assesses the extent to which the preschool settings are working towards the *Early Learning Goals*. For example, 4-year-old children are assessed on whether they are learning to count up to 10 or 20 and whether they are learning to write their own names and recognize letters by shape and sound.

The inspectors use a variety of ways to arrive at their judgments, including observation of activities, examination of resources, review of documentary evidence, and discussion with the staff and children. At the end of the inspection period, the lead inspector presents oral feedback on the inspection, and within four weeks, the preschool receives the inspection report. It is significant that the inspection report is a public document and available on the Internet. If the preschool setting does not meet the inspection requirements, funding may be withdrawn. Thus, early years educators feel great pressure to promote particular and prespecified learning outcomes, many of which focus on literacy and numeracy.

With the English government demands for raising standards, preschool educators are required to conform to OFSTED inspection criteria. Smidt (2002) also argued that due to the government policy to raise quality and standards, children are asked to learn things by rote, colour in worksheets, and generally be passive in many learning situations. The introduction of curriculum guidance for the foundation stage, combined with the statutory inspection process, appears to have had a strong influence on preschool

education in England. Although there is an ongoing debate about their appropriateness, the *Early Learning Goals* have been widely established as the basis for activity in preschool settings.

Summary

This article has examined the changing curriculum for early childhood education in England. The article has shown that traditional early childhood education in England has been child centered in contrast to approaches that are subject centered and teacher directed. Traditional early childhood education has emphasized individual children's interests, free play, firsthand experience, and integrated learning. However, in 1996, the government introduced a framework for an early years curriculum, redefined the child-centered educational model, and initiated reforms for raising standards. The national preschool curriculum framework (*Early Learning Goals*) emphasizes not only integrated learning but also literacy and numeracy. The framework also specifies particular achievements to be expected of 4- and 5-year-olds. Despite the pros and cons of the appropriateness of the framework, more formal instruction in literacy and numeracy teaching is being directly and indirectly imposed upon young children. Government initiatives and inspection have started to change the traditional nature of English preschool settings.

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The Continuity Framework: A Tool for Building Home, School, and Community Partnerships

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Abstract

In the face of today's challenging social and family issues, many new efforts are underway to help children and families. One solution that many communities have adopted is the establishment of a collaborative partnership that involves all the relevant partners--home, school, and community--in the planning and monitoring of services for children. Unfortunately, achieving a strong partnership with meaningful participation can often be difficult and time-consuming. This article focuses on a set of training materials that has been developed to assist community partnerships in their efforts. These materials highlight eight elements of continuity and successful partnerships: (1) families as partners, (2) shared leadership, (3) comprehensive/responsive services, (4) culture and home language, (5) communication, (6) knowledge and skill development, (7) appropriate care and education, and (8) evaluation of partnership success. Results from a field study that included more than 200 reviewers and 8 pilot sites are summarized. Results indicate that a majority of reviewers found the training materials easy to understand, relevant to their work, and up-to-date. In addition, data gathered from the pilot sites indicate that the partnerships found the materials practical and useful for addressing a variety of issues, including time constraints, communication gaps, differences in professional training, and funding limitations.

> We will need to become savvy about how to build relationships, how to nurture growing, evolving things. All of us will need better skills in listening, communicating, and facilitating groups, because these are the talents that build strong relationships. (Wheatley, 1992, p. 38)

Introduction

Communities face a host of problems that threaten the health and well-being of their children and families. Poverty, unemployment, inadequate care/education, and poor health care are just a few of the difficult issues that communities must confront. What makes these issues particularly challenging is that children and families who experience one problem are often likely to experience other problems as well.

Compounding the problem is that delivery of services to help children and families is typically fragmented and scattered. Even efforts designed to increase the quality and supply of services to children and families have, at times, created greater fragmentation and discontinuity.

In previous years, those who sought to improve outcomes for children concentrated only on the child. Today, however, many service providers have come to understand that the best way to serve and preserve children is to serve and preserve the supportive networks that benefit children (Family Support America, 1996). An extensive body of research identifies the elements that contribute to children's well-being, beginning with those closest to the child and moving outward to encompass the family, early care/education, the neighborhood, the community, and beyond. This ecological perspective (Bronfenbrenner, 1979) has motivated a growing number of communities to focus more closely on the need for collaboration--engaging in a process that allows the community to address many problems at once rather than one at a time.

One solution that many communities have adopted is the establishment of a collaborative partnership involving all the relevant partners--home, school, and service providers--in the planning and monitoring of services for children (Kagan, 1992; Hoffman, 1991). The goal of most of these collaboration initiatives is to improve child outcomes, recognizing that many of the child's needs are closely linked to needs of the family and the community.

Challenges to Collaboration

Community collaboratives/partnerships represent one of the most challenging--yet one of the most effective--efforts for creating a flexible, comprehensive system that meets the needs of children and families. They involve new relationships among service providers and the children and families they serve. They require time, resources, and the willingness of collaborating agencies to learn about and establish trust with each other. In short, they require change (Bruner, Kunesh, & Knuth, 1992).

As a result of the new roles and responsibilities that service providers must assume, collaboratives/partnerships encounter many common difficulties, including (Melaville, Blank, & Asayesh, 1996):

- staff or agency representatives who are resistant to relinquishing power;
- policies and regulations within individual agencies that make it difficult to coordinate services, information, and resources;
- differences in prior knowledge, training, or experience that make it difficult for members to communicate and work together; and
- lack of time to meet and plan together.

Many factors contribute to the success or failure of a community collaborative, and no two collaboratives operate in exactly the same way. However, certain guidelines seem to help smooth the way for a more successful partnership, including (North Central Regional Educational Laboratory, 1993):

- involve all key stakeholders;
- establish a shared vision of how the partnership will operate and expected outcomes for the children and families served;
- build in ownership at all levels;
- establish communication and decision-making processes that are open and allow conflict to be addressed constructively;
- institutionalize changes through established policies, procedures, and program mandates;

- provide adequate time for partners to meet, plan, and carry out activities.

The process of establishing and maintaining a collaborative partnership is not easy, and in the end, each partnership must find a way to proceed that is consistent with its community and unique set of circumstances. However, a number of resources and tools are available to help communities get started creating an effective system for delivering services. In this article, we describe one such tool that assembles elements essential to building a successful collaborative partnership.

Development of *Continuity Framework* Materials

For the past eight years, the 10 Regional Educational Laboratories (RELs) serving each region of the country have studied effective strategies for strengthening collaboration and increasing continuity among programs for young children and their families. The RELs are overseen by the U.S. Department of Education's Office of Educational Research and Improvement [now the Institute of Education Sciences], and their primary purpose is ensuring that those involved in educational improvement have access to the best information from research and practice. During the contract period of 1995-2000, the RELs established a program called the Laboratory Network Program (LNP), which convened representatives from each Laboratory as a national network working on common issues.

In 1995, the Early Childhood LNP developed *Continuity in Early Childhood: A Framework for Home, School, and Community Linkages* (U.S. Department of Education, 1995), a document designed with two key purposes in mind: first, an emphasis on the need for children and families to receive comprehensive and responsive services, reflected in the eight elements of continuity outlined in the *Framework* (see Figure 1). Taken together, the elements are intended to promote a comprehensive understanding of continuity and transition during early childhood. Second, the *Framework* offered a set of guidelines that partnerships could use to compare and assess their current policies and practices, as well as identify areas in need of improvement.

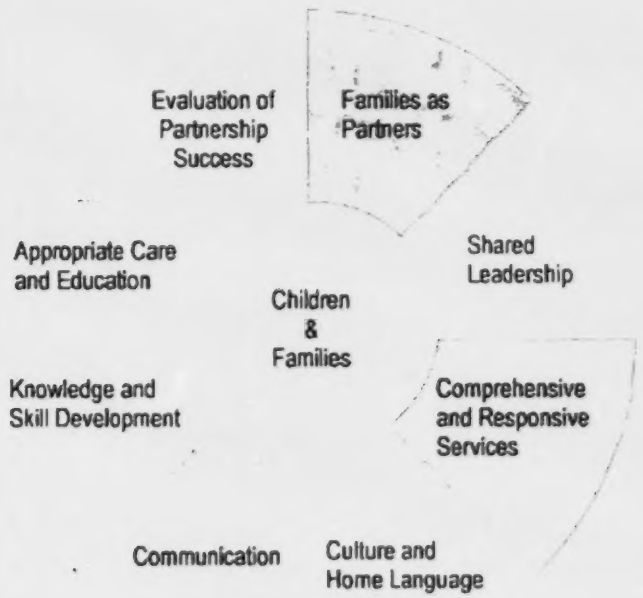

Figure 1. Elements of Continuity

(U.S.Department of Education, 1995)

An extensive field review of the *Framework* indicated that although the document was helpful and informative, many community partnerships continued to have difficulty "getting started." As a result, a *Trainer's Guide* was developed to support the use of the *Framework* and assist community partnerships in the first stages. These materials were developed by the Early Childhood LNP in collaboration with the National Center for Early Development & Learning.

The *Trainer's Guide* provides an overview of the content and potential uses of the *Framework* and includes all activities and materials necessary to conduct training sessions. The *Guide* itself consists of four training sessions that are organized around the eight elements of continuity. The materials are designed so that a local partnership has everything needed to conduct the training: background information, scripts, handouts, transparencies, sample agendas, and checklists for additional equipment and supplies:

- The first session, *Understanding Continuity,* is designed to introduce participants to the *Framework* document and help participants develop a greater understanding and appreciation for continuity.
- The second session, *Developing a Continuity Team,* highlights the importance of broad representation and shared leadership among partnership members.
- The third session, *Planning for Continuity,* emphasizes the need for a comprehensive approach to service delivery and encourages participants to examine their current partnership practices and policies.
- The final session, *Formalizing Continuity,* focuses on the importance of effective communication among group members and provides participants with an opportunity to formulate action plans.

The *Guide* is designed to be a flexible training tool, adaptable to meet the needs of a particular audience. The intended audience includes local partnerships for children and families (including Smart Start partnerships in North Carolina), Head Start Program representatives, public schools, and communities. The overall objectives of the training are (1) to enhance the collaborative's knowledge and understanding of continuity, (2) to strengthen and support collaborative groups in their efforts to work as partners, and (3) to maximize the benefit they might receive from using the *Framework.*

What follows is a description of the field test that was designed to assess the use and effectiveness of the *Trainer's Guide.* The field test focused exclusively on the *Framework* materials--no other instructional sources were employed. We will present the major findings of the field test and summarize recommendations based on those findings. In addition, we will highlight the work of several collaborative partnerships that took part in the field study, and we will describe some of the problems they encountered, how they used the *Framework* materials to address those problems, and where they are today. Specifically, the evaluation will explore:

- To what extent is the information contained in the *Framework* and *Trainer's Guide* relevant and useful to community partnerships?
- What is the perceived impact of the training and *Framework* on partnership activities?
- How do partnerships incorporate elements of the *Framework* into their ongoing activities?
- Of the review sites that indicated interest in the training materials, what proportion actually conducted the training?

Method

The overall usefulness and effectiveness of the *Trainer's Guide* was studied in two phases. Phase One consisted of document review and feedback from individuals working in the early childhood field. In Phase Two of field testing, the training was actually piloted in eight partnership sites.

Phase One: Document Review

Reviewers for the *Trainer's Guide* were solicited through the Laboratory Network Program (LNP) and at conferences related to early childhood issues. Three hundred thirteen individuals/organizations requested a set of the *Framework* materials (participant manual, *Trainer's Guide*, and a sample color transparency) and feedback form. Feedback questions centered on four areas: (1) information's relevancy and accuracy, (2) format and organization of the *Trainer's Guide*, (3) specific training needs, and (4) possible barriers to conducting training.

Of the 313 requesting materials, 215 (68.7%) reviewers returned feedback forms. Twenty-one percent (N = 45) of the respondents were members of a Smart Start partnership (North Carolina initiative), 19% (N = 40) worked in Head Start agencies, and 11% (N = 24) worked in family resource centers. Others included representatives from state agencies, school personnel, and university faculty. A majority (89%) of the respondents indicated that they are actively involved in a community partnership.

Final Follow-up with Select Reviewer Sites. Of the original 215 organizations/individuals who reviewed the *Framework* materials, 80 indicated an interest in conducting the training in its entirety and requested a complete set of transparencies. (The original materials included one sample color transparency, and the REL offered a complete set of *Framework* transparencies to all organizations making the request.) Approximately one year after receiving the materials, interviews were conducted with representatives who received transparencies. The purpose of these follow-up telephone calls was to determine if the materials had been used and the degree to which outside support or assistance might be needed to conduct the training.

Phase Two: Pilot Training

During the second phase of the field testing, the training was piloted in eight collaborative partnerships from across the nation (see Table 1). These sites were recruited through the LNP and selected based on their interest in the project. To assist with logistical details, a liaison, identified at each site, coordinated training dates and assisted with data collection. Sites varied according to demographics, partnership maturity, and sponsoring or lead agency.

Table 1
Description of Pilot Sites

Site Location	Community Type	Sponsor/Lead Agency
Beaufort, SC	Rural	Success by 6
Dothan, AL	Urban	Family Resource Center
Walnut Cove, NC	Rural	Smart Start
Bovill, ID	Rural	School-based
Valdosta, GA	Rural	Family Connections/County Commission
Wheeling, WV	Rural	Head Start
Troy, NC	Rural	Smart Start
Concord, WV	Rural	Family Resource Center

Five of the partnerships described themselves as existing collaboratives (two years or more), while the remaining three indicated that they were in the planning stages of building a collaborative partnership. Sponsors of the partnerships included Smart Start (2); Head Start, family resource centers (2); Success by 6; a public school system; and a county task force.

Across the eight sites, a total of 160 individuals participated in the training. Approximately 64% of the attendees were White, 27% were African American, and the remainder were either Hispanic, American

Indian/Alaskan Native, or multiracial.

Several of the partnerships invited persons who were not part of the collaborative partnership to attend the training. As a result, slightly more than half (54%) of the participants reported that they were current members of the partnership. The majority of these had been members less than one year (53%). Early childhood specialists represented the largest group attending the training (29%), followed by program administrators (18%), teachers/caregivers (14%), and parents (10%). Other groups represented included policy makers, members of the business community, and university faculty.

Each of the sites conducted the entire training course in the fall; however, there was some variability in delivery of training. For example, some partnerships conducted the training as described in the *Trainer's Guide*--two complete, consecutive days of training. Other partnerships modified the training schedule to meet the needs of its members and used other formats such as one day of training followed two weeks later by a second day of training.

At the conclusion of training, participants were asked to provide feedback on specific elements of the training, including organization, training content, and materials/resources. In addition, participants were asked to comment on their satisfaction with the training and the overall usefulness of the training materials. This information, along with information gathered from the review sites, was used to revise the *Trainer's Guide*.

In the six months following the training, partnership activities were studied to determine the degree to which the collaboratives incorporated content from the *Framework* into their regular activities. Materials studied included a record of stakeholder attendance and meeting minutes documenting partnership activities. At the end of this period, a follow-up survey was sent to participants at each pilot site. Survey questions focused on three major areas: (1) impact of the training, (2) impact of the *Framework* materials, and (3) overall familiarity with *Framework* materials.

In addition to the final survey with individuals who participated in the training, a final interview was conducted with seven site liaisons (one liaison was unavailable for interview). Interview questions focused on the original goal of the partnership, reasons for participating in the field study, and impact of the training and *Framework* materials.

Results

The data were analyzed to determine general response patterns and to identify logical changes or improvements to the *Trainer's Guide*. Both quantitative and qualitative techniques were used to analyze data from the review sites and the pilot sites.

Phase One: Document Review

Analyses of data from reviewer sites were conducted on 215 surveys. Table 2 summarizes the percentage of respondents who rated the *Trainer's Guide* as easy to understand, relevant to their work, accurate, and up-to-date.

Table 2
Percentage of Respondents Who Agreed or Strongly Agreed with Statement*

Survey Statement	Agreed or Strongly Agreed with Statement
Information is accurate and up to date.	94.9% (4.54)
Format is easy to understand and follow.	93.9% (4.49)

Training materials were easy to understand and follow.	92.5% (4.46)
Information is relevant to my work.	89.3% (4.41)
I would be comfortable using the materials.	83.3% (4.29)
*Note: According to the scale, 1 = strongly disagree and 5 = strongly agree. Mean scores are presented in parentheses.	

A series of open-ended questions provided respondents with an opportunity to provide more specific information and feedback. When asked what parts of the training were most useful, of those who responded, approximately 30% reported that the materials were the most useful part of the training. Reviewers specifically mentioned handouts, transparencies, and checklists. Another 22% reported that the information focusing on the need to include families and share leadership responsibilities was most useful.

Reviewers also were asked to identify the greatest training need within their partnerships. Of those who responded, more than one-third (34%) reported that they often need assistance identifying and including community stakeholders. Reviewers cited family members and members of the business community as groups that often are poorly represented at partnership meetings. Other topics representing challenges to partnerships included developing the team, sharing leadership responsibilities, and involving families in meaningful ways.

In terms of barriers or factors that would influence the use of training, most of the respondents (75%) cited time as the greatest barrier to conducting training. This factor was followed by a lack of funding (68%), the unavailability of a trainer (45%), and lack of interest of collaborative partners (39%).

Final Follow-up with Select Reviewer Sites. Of the 80 individuals/organizations who requested a complete set of transparencies, 68 were located for follow-up interviews (85%). For the remaining 12, attempts to contact the site were unsuccessful; either the person requesting the transparencies was no longer there, or the materials were never received.

Interviews revealed that 23 of the respondents had conducted training using the *Framework* and accompanying materials. Of those who stated that they had conducted the training, only two (less than 10%) had used the training in its entirety. Most had conducted at least one part of the training, selecting the portions most useful for their work. "Families as Partners," "Shared Leadership," and "Comprehensive and Responsive Services" were the elements from the *Framework* most often used for training.

An additional 17% said that although they had not conducted the training as designed, they had adapted the materials or used them in other circumstances. Examples of how they had adapted the materials included using the exercises, overheads, major concepts, and other information in training activities.

Head Start agencies were the primary sponsors for half of the training events. Public schools, area education associations, state departments of education, local partnerships, child development centers, and related-type centers were listed as sponsors or lead agencies for the remaining training activities.

Training participants included staff and administrators at Head Start agencies, preschool and child care providers, local education agencies, schools, school improvement teams, state departments of education staff, local family service agencies and boards of directors, and parents.

All who said they had used the training materials were asked to comment on the usefulness of the training. The majority of respondents rated the training as "very useful" or "useful," and all said they would recommend the training to others. Particular aspects of the training that respondents liked included:

- professional quality, clarity of materials, and sequencing of content of the *Framework;*
- handouts, activities, and overheads;

- content and the ability to present the material at multiple skill levels; and
- ease of use of the *Framework.*

There were suggestions for improving the training. Four respondents said the course was "too long," especially if used in school systems or with parents. Others maintained a need for greater emphasis on action planning and implementation, "more written support materials (research, position support, background), and additional copies of key pieces of materials that helped shape the *Framework.*"

Phase Two: Pilot Training

In terms of the training quality and overall effectiveness, most of the participants rated the training sessions as either "good" or "excellent." Participants tended to rate the second day of training as higher in quality and more effective than the first day of training ($M = 4.392$ and $M = 4.17$, respectively, based on a 5-point scale).

Participants also evaluated the effects of the training and estimated its impact on future partnership practices. Using a four-point Likert-type scale, participants rated the extent to which they agreed with each statement. Table 3 summarizes participants' appraisal of the training and reinforces the focus of the original training objectives.

Table 3
Summary of Participants' Reactions to Training by Objective*

Objective 1: To enhance the collaborative's knowledge and understanding of continuity	Mean	Standard Deviation
As a result of the training, I believe that I am motivated to build and strengthen continuity efforts in my community.	3.44	.65
As a result of the training, I believe that I have a better understanding of continuity and why it is important.	3.41	.65
I believe that this training will have an impact on increasing awareness of new skills and knowledge for our team.	3.31	63
Objective 2: To strengthen and support collaborative groups in their efforts to works as partners		
As a result of the training, I believe that I am better able to participate as a member of a home, school, and community partnership.	3.40	.65
I believe that this training will have an impact on how decisions are made and the planning we do for services.	3.25	.59
I believe that this training will have an impact on changing/enhancing the quality of community practices.	3.23	.58
Objective 3: To maximize the benefit the collaborative might receive from using the *Framework*		
As a result of the training, I believe that I am better able to use the *Framework* as a tool for exploring continuity and transition	3.26	.63
General		

I believe that this training will have an impact on positively affecting outcomes for children and families.	3.31	.63
*Note: According to the scale, 1 = strongly disagree and 4 = strongly agree.		

In addition to participant ratings immediately following the training, data were collected on regular partnership activities after the training. Analysis of materials such as meeting minutes revealed that during the six months following completion of the training, five of the eight sites reported that they continued to use the *Framework* materials. Exactly how the materials were used varied from site to site. Two of the sites selected specific elements of the *Framework* as their priority concerns for the coming year. They then organized subcommittees to review the partnerships' practices with respect to those elements and make recommendations for improving existing services. Another partnership used the materials to provide training to other agencies and organizations not directly involved with the partnership. The remaining two partnerships used the *Framework* as a resource for improving transition practices with their communities.

At the end of the six months, a final survey was distributed to participants at the last partnership meeting of the year, and surveys were mailed to those not in attendance at the final meeting. Approximately half of the individuals who participated in the training (81 of 160) responded to the survey. Participants were asked to rate the extent to which the *Framework* materials had had an impact on partnership practices. On a four-point scale (4 = "a great deal," 3 = "some," 2 = "very little," and 1 = "not at all"), the majority of respondents (88.6%) reported that the training had "impacted" their knowledge and skill development "some" or a "great deal." Respondents also thought that the *Framework* had at least "some" impact on the knowledge and skills development of their partnership (83%) and community (72%). The majority (97.4%) speculated that the *Framework* would have at least some future impact.

Finally, participants were asked to indicate the single greatest impact they experienced as a result of the training. Approximately 41% reported that as a result of the training they felt more motivated to build or strengthen efforts to support continuity of services for children in their communities. Thirty-five percent of the respondents said they had a better understanding of continuity and its importance; 17% felt that the training prepared them to be better members of their partnership; and 7% said that the training gave them a greater understanding of the *Framework* as a tool.

Stokes County Partnership for Children, King, NC

An ongoing goal of the Stokes County Partnership for Children is to create a system that encourages service providers to work together and promotes continuity for children and their families. Members of the partnership began by using the *Framework* to build their own knowledge and skills about continuity; however, they soon recognized the need to inform others of the importance of continuity in children's lives. As a result, the Partnership conducted a series of focus groups and meetings among parents and family members within the community. They used information from Elements 3 (Comprehensive/Responsive Services) and 7 (Developmentally Appropriate Care/Education) to explain what was needed to support continuity and its potential benefits for children. These meetings were also an opportunity to inform families of the various resources and supports available within the community. Later, the focus groups were expanded to include *all* stakeholders (e.g., child care, kindergarten, Head Start, school administrators, special needs coordinators, etc). The information gathered from these meetings has been used to guide the development and implementation of policies and practices that promote continuity.

Final Interview with Liaisons. In the final interview conducted with site liaisons, five of the seven liaisons reported that the overall goal of their partnership is to improve services for children and their families by connecting agencies and strengthening the collaborative bonds between those agencies. Three of the liaisons specifically mentioned the need to improve transitions and create a system of responsive and

comprehensive services.

In addition, liaisons were asked to talk about their reasons for participating in the field-test process. At least three of the liaisons cited low levels of collaboration across agencies and indicated that partnership meetings were used primarily as a time for sharing information. Others saw the training as an opportunity to invite additional partners to the table and begin a discussion of how they could better work together.

Finally, liaisons were asked to rate the extent to which the *Framework* materials had been helpful in accomplishing their overall partnership goal. Using a five-point scale, five of the liaisons rated the *Framework* materials as either "helpful" (4) or "very helpful" (5). The remaining two liaisons rated the *Framework* materials as at least "somewhat helpful" (3).

Discussion

Developing and maintaining a community collaborative is hard work, and it is a challenge that requires a great deal of commitment and cooperation from those involved. Training and resource materials available to help community partnerships build a more responsive system must address such issues as time constraints, communication gaps, differences in professional training, and funding limitations. Given these challenges, the *Continuity Framework* and its *Trainer's Guide* seem to be important and useful tools for helping partnerships increase collaboration and involvement.

Data gathered from participant ratings and key-informant interviews indicated that the training was helpful in a number of ways. A feature of the training mentioned by many of the participants was the fact that the experience helped "level the playing field." That is, it provided stakeholders with a common language to use as they worked together. As illustrated in the following example, stakeholders often come from a variety of agencies and backgrounds, which can be a major impediment when a community must begin to work together and coordinate its efforts.

The case studies in the sidebars highlight the work of four collaborative partnerships that took part in the field study. These case studies discuss some of the problems they encountered, how they used the *Framework* materials to address those problems, and where they are today.

Bovill, Idaho, Collaborative

Bovill is a small town (population 310) located in the north central part of the state. Bovill has no resident doctor or dentist. At the time, there also was no child care center or preschool available to children. (The closest one was 35 miles away.)

In 1998, various members of the community decided that they wanted to do something to help improve the situation for children. This group of citizens brought together parents and virtually every local organization to work on a plan that would support the learning needs of children and their families. Part of this effort was a proposal submitted to the J.A. and Kathryn Albertson Foundation that would help fund an early learning center. In 1999, they were awarded a grant, and they began the work to open the Bovill Early Childhood Community Learning Center.

However, once the work began, members of the partnership found that they did not have a common vocabulary to talk about the issues of early childhood education. There were also difficulties associated with establishing a partnership, such as "Who else should be included?" and "How do you get started?" In an effort to "get started" and begin the planning process, the partnership elected to participate in the field testing of the *Framework* materials.

Framework training was provided over two consecutive days and built into the inservice

training schedule of the elementary school. In addition to staff and faculty from the elementary school, representatives from other agencies and organizations participated, including the health department, the Idaho Department of Disabilities, news media, schools, early childhood education, Even Start, parents, university students, attorneys, community leaders, and businesses.

According the site liaison, the *Framework* materials were used:

- To improve awareness of key issues in providing high-quality services. The *Framework* provides direction to help develop a program that really works.
- To provide a common language and for internal communication enhancement. Now everyone "speaks the same language."
- As an external communication tool. According to the liaison, "it is so much easier to talk with funding sources when you use the structure of the elements as a base."
- To validate their progress toward providing the best practices in early childhood education.
- As a piece of the Bovill Elementary School improvement plan.

Positive impact on individual partnership members was cited as another basis for success of the training. Many indicated they had a better understanding of continuity and were more motivated to continue to work on the difficult issues that often arise as part of the collaborative process. An added value of the training was the opportunity to spend time together and develop relationships with persons from other agencies. Often, these individual relationships help form the basis for collaborative work within the partnership.

Based on the sites that continued to use the materials, the *Continuity Framework* and its *Trainer's Guide* seem to be equally useful to both existing and newly established partnerships. A common experience in the maturation of partnerships is that they are prone to lose initial momentum, often stagnating into "easy" roles such as simple information sharing. A serendipitous discovery of this study is that such partnerships evidenced rejuvenation of their efforts after participating in the training (see the Valdosta, Georgia, example).

Valdosta, Georgia, Collaborative

The Lowndes County/Valdosta Commission for Children and Youth has been in existence for more than a decade, and during this time, the partnership has experienced various "ups and downs." According to site liaison Vickie Elliott, cycles are a normal part of the collaborative process, "They may be the result of staff turnover or changes in the board chair and/or board members." She reports that participation in the training provided members with practical, research-based information. This information served as a reminder to members that they were doing good work and that their work was important.

Since the training, the partnership has continued to use *Framework* materials as a reference and resource. For example, during a recent meeting, members began a discussion regarding the evaluation of partnership activities. They used Element 8: Evaluation of Partnership Success to help shape and guide this discussion. In addition, the partnership has applied for and received a 21st Century Learning Community grant. Because of the knowledge and understanding they gained during the training, members requested funds for a case manager position to be based at each school and conducting home visits. It is hoped that this strategy will facilitate communication and create greater continuity of services for students and families.

Finally, the data indicate that change takes place slowly. Participants reported that the training had had some impact on their community but felt that the greatest impact was yet to come. Bringing everyone to

the table is not enough. True collaboration that produces continuity in services for children takes place over a long period of time, as agencies that have not previously worked together begin to get to know each other and slowly modify procedures and practices.

Marshall County Tadpole Team, Wheeling, WV

Efforts to collaborate are often driven by the realization that single agencies cannot solve problems alone. Partners must be willing to jointly plan and implement new ventures, as well as pool resources such as money and personnel. Nowhere is this need to collaborate and pool resources more crucial than in Marshall County, WV. Located in the northern part of West Virginia, Marshall County remains a predominantly rural county. With a population of approximately 36,000, Marshall County has seen a decline in the number of residents over the past two to three years, largely attributed to the economic hardships of the area. This part of West Virginia relies heavily on the coal and steel industries, and as these industries have fallen on hard times, so too have many families. As a result, many families have moved away to find other employment; however, many others have sought support from social services agencies within the community. In order to make the most of the limited resources and support available within the county, many of the local agencies (e.g., Northern Panhandle Head Start, Starting Points Center, Tadpoles Team) came together to form a community collaborative. Although their collaborative meetings began more as a time for sharing information, members soon realized that to be a true "working group," they would need to broaden the meeting agendas and formalize the collaborative relationships. Using the *Framework* materials as an assessment tool, members worked through each element identifying the gaps in services and generating ideas for possible programs and procedures to address those gaps. This shift encouraged members to devote meeting times to discussing specific issues facing the community. Moreover, it encouraged members to formalize the partnership with written agreements. These agreements have allowed members to make a solid commitment to the collaborative, as well as clarify specific roles and responsibilities for services.

Beyond the content of the training and issues related to the collaborative process, the field study underscored the importance of training structure and design. Many study participants praised the *Framework* materials for flexibility and relevance to a variety of contexts. The training materials were designed so that particular attention was devoted to issues such as target audience attributes (e.g., varied educational and professional development backgrounds), which dictate the appropriate level of sophistication as well as the need for course module structure (i.e., overall organization and scripting) to be highly adaptable to local training needs.

Conclusion

The field studies indicate that community partnerships benefit from training and technical assistance that help with the process of getting started, as well as recapturing momentum and focus. Additional research is needed to document the ongoing efforts of these communities and explore whether the *Framework* materials continue to have an impact on community practices and outcomes, as many of the participants predicted. Further study also is needed to determine what other kinds of training or technical assistance might be useful to these partnerships as they work to build capacity and expand or grow new programs.

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Development of a Comprehensive Community Assessment of School Readiness

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Abstract

This paper describes the development of a multipart assessment of kindergarten readiness for the State of Vermont. The approach described reflects emerging consensus around the appropriate domains of development to include in child assessments, as well as the need to assess schools' readiness for young children and their families. The approach differs from some states' approaches, however, in its emphasis on readiness data for purposes of community-level accountability rather than to support individualized instruction. Data on children's developing competencies early in the kindergarten year (in five domains) were reported by teachers across the state (N = 181), on approximately half of the state's kindergartners (N = 2,992). Data on the "readiness" of schools were reported by principals (N = 197). Schools' "readiness" was conceptualized as including the areas of "smooth transitions to school," "instruction and staff development," "partnership with community," and "resources." Results confirmed the viability of a brief teacher-reported assessment of children and an assessment of "ready school" practices. Further tasks related to promoting local use of the assessment data, and implications for policy, are identified.

Introduction

Ever since the National Education Goals Panel (NEGP) identified as its first priority that "all children enter school ready to learn," but especially within the past few years, states have endeavored in various ways to come to terms with the challenge of measuring progress toward such a goal. "School readiness," or "ready for school," has become a shorthand for what is in truth a multidimensional concept--one that has the potential to do harm as well as good, as states move toward implementation of specific assessments.

As this work has progressed, a degree of consensus has emerged around certain critically important points, at least among those expert in working with young children. One is that a child's readiness for school is not simply a matter of alphabet knowledge, or even letter-sound correspondence, or other predominantly cognitive accomplishments, as important as those are. Rather, readiness includes social-emotional abilities, "approaches to learning" (i.e., dispositions such as enthusiasm, curiosity, and persistence), and communication skills (receptive and expressive), as well as motor development and physical health (National Education Goals Panel [NEGP], 1992).

Another emerging point of consensus is that readiness is an interaction: as children need to be ready to make the most of their school experience, so too do schools need to be "ready" to meet the diverse needs of young children and their families. Therefore, any comprehensive assessment of "school readiness" needs to include indicators of schools' capacities.

The National Education Goals Panel (NEGP) and others have identified important features of schools that indicate they are "ready" to accommodate the varied needs and experiences of young children entering school, and their families. According to these experts (Shore, 1998, p. 5):

1. Ready schools smooth the transition between home and school.
2. Ready schools strive for continuity between early care and education programs and elementary schools.
3. Ready schools help children learn and make sense of their complex and exciting world.
4. Ready schools are committed to the success of every child.
5. Ready schools are committed to the success of every teacher and every adult who interacts with children during the school day.
6. Ready schools introduce or expand approaches that have been shown to raise achievement.
7. Ready schools are learning organizations that alter practices and programs if they do not benefit children.
8. Ready schools serve children in communities.
9. Ready schools take responsibility for results.
10. Ready schools have strong leadership.

Notwithstanding these points of agreement, several distinctions in approaches can be drawn based on this work thus far. Perhaps the most important of these distinctions concerns the unit of analysis. In some examples of states' work in this area, the aim is to have a measure of "school readiness" that paints a portrait of young children's competence that has validity at the child level: that is, what an individual child "knows and can do." In contrast is an approach that aims instead at group-level validity: that is, what a *community's* children "know and can do." Of course, the psychometric requirements of these two approaches are very different.

A related issue concerns the purpose for such assessments. On the one hand, a detailed profile of individual child performance can be part of a process of continuous assessment throughout the school year, and the profile can function as a tool for improvement of instruction. On the other hand, an assessment of children's "readiness" can be simply a "snapshot" taken at what is in our culture an important developmental transition point. In the latter case, the implicit reference is, again, to how well *a community* has prepared its young children to be "ready" for school. Thus, the latter type of assessment takes its place within a framework of shared accountability (Emig, 2000; Meisels, 1998; Saluja, Scott-Little, & Clifford, 2000).

This paper describes the development and initial results of a set of brief measures intended to describe, at a community level, children's readiness for kindergarten and schools' readiness for young children and their families. Kindergarten teachers were the informants for children's readiness, and teachers and school principals provided information on schools' readiness. Taken together, the results describe five dimensions of children's readiness and four dimensions of schools' readiness.

Method

Development of the Measures

Our approach to assessment, as well as our choice of specific items, grew out of extensive earlier work in several Vermont communities that validated the reliability of kindergarten teachers as informants about children's readiness. In addition, our approach drew on the experiences and judgments of providers of early childhood services (Gorman & Burns, 1999).

Specific measures were further refined by an expert panel representing members of Vermont's departments of public health, education, mental health, and human services agencies, in addition to representatives of providers of early childhood services and staff from the University of Vermont's Department of Psychology. As part of this work, there was extensive review of the literature on assessment of "school readiness," as well as examples of specific measures used in other states.

All measures were pilot tested in four Vermont communities in the spring of 2000. Forty-one kindergarten teachers, in 27 schools, responded regarding 620 children. Twenty-four principals responded to the "ready schools" questionnaire. Additionally, nine focus groups were held in three geographically diverse regions of the state. Kindergarten teachers, parents of young children, and early childhood professionals were separately invited to focus groups to comment on the proposed measures. Focus group participants generally endorsed the constructs represented on the "ready kindergartners" measure. Concerns had mainly to do with potential use (and misuse) of the information. Based on these results, further modifications to the instruments were made. (For details, see Gorman & Burns, 2000.)

Identification of five domains within the "ready kindergartners" measure followed the recommendations of the NEGP and others.[1] The final measure consisted of 24 items, together with demographic information on children and teachers. Teachers were asked to rate children individually on the items, through recollection rather than direct assessment, 4 to 6 weeks into the kindergarten year. An example of items included under "social and emotional development" is *"Can meet/play with different children his/her own age."* An example of items included under "approaches to learning" is *"Appears enthusiastic and interested in classroom activities."* An example of items included under "communication" is *"Communicates needs, wants, or thoughts in primary language."* An example of items included under "cognitive development and general knowledge" is *"Understands the purpose of books."* An example of items included under "physical health and well-being" is *"Demonstrates self-help skills (e.g., toileting, wiping nose, washing hands) with occasional teacher assistance."*

Identification of four domains of "ready schools" was similarly informed, with the expert panel determining assignment of specific items to domains, item weights within domain, and criteria ("standards") in each domain for what would be considered a "ready school." The primary source for the "ready schools" information was a 15-item questionnaire completed by principals of schools with kindergartens. Kindergarten teachers provided information about classroom support personnel. An example of items related to "smooth transitions to school" is one asking whether the school offers "move-up days"[2] prior to the beginning of school. An example under "instruction and staff development" is one asking about average kindergarten class size. Under "partnership with community," an example is an item asking about school sponsorship of after-school care. An example of items included under "resources" is one asking teachers about the availability of various support staff (e.g., behavior specialist). The full set of measures was fielded statewide in the 2000-2001 school year.

Results

Characteristics of the Sample

The assessment was intended to include all children in public school kindergarten in Vermont, their teachers, and their principals. Because this year was the first of a new effort, and because participation was voluntary, there was less-than-universal participation.

Valid data were received from 181 kindergarten teachers (47% of the 383 contacted). Responding teachers represented 52 of Vermont's 60 supervisory unions.[3] Child-level data were submitted on 2,992 kindergartners, which is approximately 46% of estimated kindergarten enrollment. Although 84% of principals (197) responded, they represented every supervisory union within the state (Table 1).

Of course, not all respondents answered every item on the instruments, so the number of valid responses varies somewhat by item. (Items having a nonresponse rate of 5% or greater are noted.)

Table 1
Sample Characteristics

Respondents	Number Responding	Estimated Pool of Possible Respondents	Percent Responding
Kindergarten Teachers	181	383	47.3
Children (kindergarten teacher report)	2,992	6,511	45.9
Kindergarten Principals	197	234	84.2

Kindergarten Teachers	
Mean length of experience with kindergarten teaching	10.2 yrs. (*sd*=7.03)
Mean length experience with teaching (total)	17 yrs. (*sd*=8.29)
Have elementary education license	93.4 pct.
Have early childhood endorsement	31.5 pct.
Teach half-day program	58.7 pct.
Teach full-day, 5 days/week program	27.3 pct.
Teach full-day, partial-week program	14.0 pct.
Kindergarten Students	
Qualifies for special education services	7.4 pct.
Qualifies for ESL/bilingual services	1.6 pct.
Qualifies for Sec. 504 services	1.0 pct.
Teacher reports on child's experience prior to kindergarten:	
Was in regulated early childhood program	66.2 pct.
Was not in regulated early childhood program	16.4 pct.
"Don't know"	2.0 pct.
Missing response	15.3 pct.
Schools	
1 kindergarten session	45.9 pct.
2 kindergarten sessions	32.5 pct.
3+ kindergarten sessions	21.6 pct.
Mean average class size	13.7

Results of "Ready Kindergartners" Assessment

Table 2 shows the item-level results for the teacher-scored child competencies. In order to test internal consistency of the items by domain, Cronbach's alphas were calculated. Results indicate high intra-domain reliability, with coefficients ranging from .87 (social-emotional development) to .94 (approaches to learning).

Table 2
Results of "Ready Kindergartners" Assessment

Social and Emotional Development Pct. "Practicing" or "Performing Independently" on ***all*** items			**62.5**	
	Pct. "Not	Pct.	Pct.	Pct. "Performing

	Observed"	"Beginning"	"Practicing"	Independently"
Can meet/play with different children	0.7	13.9	33.8	51.5
Uses problem-solving skills in social situations	5.5	26.6	38.8	29.2
Separates easily from caregiver	2.1	6.0	19.3	72.6
Appropriately expresses emotions	3.0	15.4	31.8	49.8
Adapts to transitions	0.9	11.9	31.2	56.0
Interacts positively with adults	0.5	8.8	28.4	62.2
Approaches to Learning Pct. "Practicing" or "Performing Independently" on ***all*** items			**60.5**	
	Pct. "Not Observed"	Pct. "Beginning"	Pct. "Practicing"	Pct. "Performing Independently"
Follows simple rules	0.7	15.7	33.8	49.8
Persists with self-directed activity	1.8	12.4	28.9	56.9
Appears enthusiastic	1.1	10.0	30.1	58.8
Uses a variety of problem-solving strategies	5.2	23.6	39.0	32.2
Pays attention	2.8	19.8	33.1	44.3
Knows how and when to use adults	1.6	16.1	34.5	47.9
Initiates activities in the classroom	3.7	16.3	33.7	46.2
Is curious	2.4	14.0	30.7	52.9
Communication Pct. "Practicing" or "Performing Independently" on ***all*** items			**80.3**	
	Pct. "Not Observed"	Pct. "Beginning"	Pct. "Practicing"	Pct. "Performing Independently"
Communicates needs	1.1	11.6	26.8	60.5
Understands simple directions	1.0	10.9	28.1	59.9
Engages in conversation	1.7	12.7	28.9	56.6
Cognitive Development/General Knowledge Pct. "Practicing" or "Performing Independently" on ***all*** items			**67.6**	
	Pct. "Not Observed"	Pct. "Beginning"	Pct. "Practicing"	Pct. "Performing Independently"
Understands purpose of books	1.1	11.0	27.1	60.9
Can recall and explain sequences of events	7.1	18.1	34.6	40.2
Recognizes name in print	1.2	8.5	20.1	70.3
Uses pencils, crayons, and brushes	1.2	15.4	26.8	56.7
Engages in imaginative play	2.8	9.2	28.7	59.3
Physical Health and Well-Being				
Demonstrates self-help skills	Pct. "Not Observed" 0.4	Pct. "Beginning" 4.3	Pct. "Practicing" 16.6	Pct. "Performing Independently" 78.7
Child's ability to learn appears inhibited	Pct. "Not	Pct.	Pct.	

by:	Observed"	"Seldom"	"Sometimes"	Pct. "Often"
Illness (missing response: 5.6 pct.)	83.9	11.8	3.3	1.0
Fatigue (missing response: 5.2 pct.)	78.2	13.2	7.4	1.3
Hunger (missing response: 6.0 pct.)	85.1	12.0	2.2	0.7
Emotional issues (missing response: 10.3 pct.)	75.1	9.9	9.5	5.5

Correlations between domain sum scores were also calculated. All such scores were significantly positively correlated, with coefficients ranging from .72 to .87. To further explore the item-level structure of results, a principal-components analysis using varimax rotation was applied.[4] This analysis was run for two-factor and three-factor solutions, respectively. The three-factor solution, accounting for 65.1% of the variance, was preferred. Factor-loadings by item are noted in Table 3. Results suggest that these "readiness" competencies are highly interrelated, which is consistent with what we know of development in young children.

Table 3
Rotated Factor Matrix for the "Ready Kindergartners" Questionnaire
Rotated Factor Matrix*

	Factor		
	1	2	3
Can meet/play w/children of own age	.639	.397	.295
Uses problem-solving skills in social dilemmas with peers	.651	.386	.308
Separates easily from caregiver	.353	.201	.162
Appropriately expresses range of emotions	.618	.413	.232
Adapts to transitions within school day	.486	.640	.255
Interacts positively with adults in schoolroom	.525	.563	.224
Follows simple rules/instructions	.289	.792	.317
Persists with self-selected activity (15 mins)	.386	.611	.429
Apprears enthusiastic/interested in class activities	.577	.479	.351
Uses variety of strategies to problem solve in class	.614	.436	.365
Pays attention during teacher-directed group activities	.342	.676	.396
Knows how/when to use adults as resource	.579	.510	.348
Initiates activities in the classroom	.666	.258	.411
Is curious (asks questions, probes, tries new things)	.684	.245	.438
Communicates needs/wants/thoughts in primary language	.624	.330	.388
Understands simple directions/requests and information	.452	.502	.470
Engages in conversation (complete sentences, turn taking)	.619	.350	.442
Understands purpose of books	.357	.262	.652
Can recall activity and explain sequences of events	.408	.225	.607
Recognizes own name in print	.204	.315	.679
Uses pencils, crayons, brushes to express ideas	.287	.334	.713
Engages in imaginative play	.483	.192	.535

*Note: Rotation converged in 12 iterations. Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization.

It is noteworthy that on each of the individual competencies rated by teachers, at least three-quarters of

children were either "practicing" or "performing independently." This result suggests face validity of the instrument as a measure of what beginning kindergartners can reasonably be expected to know and do.

Forty-eight percent of children in the sample were rated as "practicing" or "performing independently" on all items within all domains. Thirteen percent did not meet this standard in a single domain; 12% did not meet the standard in two domains and three domains, respectively; and 14% did not meet this standard in any of the four domains.

There were eight items where less than 50% of kindergartners were rated as "performing independently":

- uses problem-solving skills in social situations
- appropriately expresses emotions
- follows simple rules
- uses a variety of problem-solving strategies
- pays attention
- knows how and when to use adults
- initiates activities in the classroom
- can recall and explain sequences of events

Item 24 asked teachers to consider the extent to which a child's learning "appears to be inhibited by" illness, fatigue, hunger, and emotional issues, respectively. Although higher nonresponse rates (5%-10%) for this item suggest cautious interpretation, it is noteworthy that 4% of children were identified by teachers as having illness as a barrier to learning "often" or "sometimes"; fatigue, 9%; hunger, 3%; and emotional issues, 15%.[5]

Results of "Ready Schools" Assessment

Table 4 shows the items making up each domain, together with the preferred responses contributing to the domain "standard" (component item weights available from the authors on request), and the percentage of supervisory unions (based on participating teachers and principals) providing each response.

Table 4
Results of "Ready Schools" Assessment

Smooth Transitions to School Average percent of standard met across participating SUs		**81.0**
	Respondents (*N*)	Pct. with preferred response
The following activities are offered before school entry	Principals	
Move-up days	(197)	53.3
Welcome notes sent to all kindergartners	(197)	73.6
Registration day	(197)	78.7
Practice bus ride	(197)	43.7
Information packets describing KG distributed to parents	(197)	73.6
The following activities are offered before school entry or within the first month of school:	Principals	
Teacher visits to preschool/child care/parent child centers	(197)	64.0
Kindergarten screening	(197)	88.3
Home visits to each new student	(197)	28.4

Kindergarten open house	(197)	90.4
Telephone calls to all kindergarten parents	(197)	48.7
Classroom visits	(197)	67.5
Parent/child/teacher conferences	(197)	54.8
Questionnaires sent to all kindergartners and their parents	(197)	58.4
Instruction and Staff Development Average percent of standard met across participating SUs		**67.5**
	Respondents (*N*)	Pct. with preferred response
Kindergarten teacher's state endorsement/license	Teachers	
Elementary Education	(181)	93.4
Early Childhood Education	(181)	31.5
Average kindergarten class size ≤ 16	Principals (193)	76.2
Kindergarten instructional practices are derived from	Principals	
Teacher observations	(197)	86.3
Statewide standards	(197)	94.4
School district curriculum	(197)	94.4
Standard testing/outcome data	(197)	39.6
Professional standards (e.g., NAEYC)	(197)	44.2
Parent input	(197)	55.8
Preschool teachers	(197)	49.7
Teacher's own resources	(197)	92.4
Community/parent group	(197)	13.2
Regional education resource center	(197)	5.1
Partnership with Community Average percent of standard met across participating SUs		**71.3**
	Respondents (*N*)	Pct. with preferred response
School's action-planning process addresses issues of:	Principals	
Pre-kindergarten	(173)	34.7
Kindergarten	(184)	71.7
School-sponsored activities with at least one-third of parents participating:	Principals	
Open houses	(196)	98.0
Parent-teacher conferences	(194)	100
Family "fun" activities (fairs, dinners, dances, etc.)	(186)	80.7
PTA/PTO	(188)	31.4
Community-based activities (school-sponsored or co-sponsored):	Principals	
Recreational programs	(197)	64.5
Parent education	(197)	61.4
Family literacy activities	(197)	68.5
After-school care	(197)	38.1

Before-school care	(197)	13.7
Summer/vacation/enrichment programs	(197)	73.6
Overall level of kindergarten parent involvement (e.g., classroom volunteers, participation on committees, help with special projects) is at least one-third	Principals (195)	66.7
Resources Average percent of standard met across participating SUs		**94.1**
	Respondents (*N*)	Pct. with preferred response
Types of support available (may require a wait)	Teachers	
Professional support		
Colleagues	(175)	99.4
Principal	(174)	99.4
Parents	(173)	99.4
Specialized services		
Behavior specialist	(174)	81.0
School counselor (mental health/guidance)	(174)	98.3
Occupational therapist	(175)	97.1
Physical therapist	(171)	85.4
School nurse	(174)	97.7
School psychologist	(172)	76.7
School social worker	(167)	52.7
Community mental health social worker	(163)	69.9
Speech and language therapist	(172)	97.1
Curriculum/instruction		
Curriculum specialist	(164)	67.1
Instructional support team	(175)	100
Reading/literacy specialist	(170)	86.5
Special education teacher	(175)	99.4

Responses to the survey questions showed that teachers and principals rated schools as most successful in the area of "resources" (on average, 94% meeting the criterion), indicating that a number of types of special services were available to kindergarten teachers, even if these might involve some waiting time. In general, schools were also rated fairly highly (81%, on average, meeting the criterion) on "smooth transitions to school." Although the proportion of schools offering any single practice in this area varied widely, most offered at least some activities intended to help children and their parents cross this threshold. Schools were rated less highly on "instruction and staff development" and "partnership with community." Particular areas of weakness in the first of these domains were a low proportion of teachers with specific training in early childhood education, and larger-than-optimal classes. Within the "partnership" domain, open houses and parent-teacher conferences were nearly ubiquitous among responding schools, but fewer schools reported sponsoring before- or after-school care, or reported that their action plans addressed issues of pre-kindergarten.

Discussion

The developers of any assessment of "school readiness" are obliged to make clear how the results are (and

are not) properly to be used (Meisels & Atkins-Burnett, 2000; National Association for the Education of Young Children, 1995). The purpose of Vermont's assessment strategy is to inform community-level discussions about the shared responsibility that parents, school personnel, early childhood professionals, and others have for seeing that young children begin formal schooling with optimal prior experiences and current supports. We have shared results from the first-year assessment with all participating communities in order to promote such conversations, which have begun. In addition, summary information from the assessment is now included in Vermont's Agency of Human Services *Community Profiles*, which provide local data on a number of social indicators, including many related to school readiness (e.g., rates of low birthweight, immunization rates at kindergarten, vision- and hearing-screening rates).[6] In Vermont, as in many other states, much of educational policy is determined at a local level, so it is important that appropriate data be available to inform those decisions.

The results of the first-year assessment confirm that using a brief, multipart survey of kindergarten teachers and school principals can yield information that paints a broad portrait of community status with regard to this critical developmental juncture.

Some tasks still ahead of us include helping local communities to understand their "readiness" data, how to use these data to motivate improvements in one or more areas, and the importance of monitoring changes in these results over time. Potentially, these data could address policy-related issues at a state level by allowing us to study groups of children longitudinally, for example, by linking school readiness results to second-grade reading scores, subsequent placement in special education, and other measures of school success. In addition, we are developing a process to incorporate in these assessments parents' perspectives, both on children's readiness for school and schools' readiness for children.

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Notes

1. Assessment of the "physical health and well-being" domain was to rely primarily on reporting by school nurses. However, the pilot study revealed significant resistance from schools to this data-collection burden. Consequently, the only individual-level data on this area came from a single item on the questionnaire for teachers. These data were supplemented by aggregate-level (by school) information on the percentage of first-graders screened for vision and hearing problems (not reported here).

2. "Move-up days" provide an opportunity for an incoming child and his or her parents to experience an actual kindergarten class, usually toward the end of the school year prior to the one during which the child will enter school.

3. In Vermont, supervisory unions designate school governance units that typically include a high school, one or more elementary and middle schools, and a single superintendent.

4. Item 24, the sole item dealing with physical health and well-being, was omitted from this analysis.

5. Readers may contact the first author for information on accessing the original data.

6. The *Community Profiles* may be accessed at http://www.ahs.state.vt.us.

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Modeling Collaboration, In-Depth Projects, and Cognitive Discourse: A Reggio Emilia and Project Approach Course

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Abstract

This article discusses two early childhood professors' experience of teaching a weeklong collaborative course on Reggio Emilia, the Project Approach, and documentation. Principles of adult learning were used as a foundation to structure and organize the course, in which students applied their knowledge and skills to in-depth investigation of projects and documentation of learning. The article discusses issues of conflict that emerged among group members and reflects upon conditions needed to support intellectual discourse. Final reflections from the students and professors are highlighted.

Introduction

We are early childhood education professors teaching in programs at two different institutions of higher education in Montana. While engaging in lively discussions of current issues and practices in early childhood education, we discovered our mutual, complementary interests and began to explore the idea of offering a team-taught summer intensive course to early childhood students and practitioners. We wanted to introduce students to the history, framework, principles, concepts, and experiences of Reggio Emilia, the Project Approach, and documentation; to highlight their commonalities and differences; to share current research and practices; and to assist students in transforming their knowledge into practice. This article is the story of our collaborative experiences, challenges, and reflections.

Teaching the course described in this article was our first experience at collaborating. We met over a period of weeks to design the course. During this time, we embraced the ideas of shared decision making and taking responsibility for determining the content, assignments, structure, and organization of the course. We learned that an attitude of openness, trust, and support was necessary to achieve our goals and outcomes. We began to prepare for the course using the principles and practices of early childhood education and adult learning as a foundation. We were eager to offer a course for adults that required them to learn in ways that children in their classes are required to learn (Duckworth, 1996).

The course was held for five days at Birch Creek Education Center, a former Conservation Corps Camp,

located on several hundred acres nestled in the remote southwestern mountains of Montana. Thirty students stayed in dormitory-style rooms and cabins and shared meals in the main lodge. The natural beauty of the area featured forests, geological formations, creeks, ponds, lakes, wildflowers, natural vegetation, animals, and hiking trails, thus providing many opportunities for retreat, exploration, interaction, and reflection. Other features of the setting included a common meeting room, a classroom warmed with a wood-burning stove, and a large "studio" that was aesthetically arranged with a selection of resources. The participants from across Montana included active practitioners and traditional students, with educational levels ranging from first college experiences to the pursuit of master's degrees.

Adult Learning

As early childhood professors and adult educators, we subscribe to the adult learning theory *andragogy*, popularized by Malcolm Knowles (1984). This theory views adults as self-directed learners, motivated by intrinsic rather than extrinsic rewards, who bring a multitude of life experiences into the learning situation. According to Knowles, it is not only ineffective to ignore this previous experience and knowledge, but it also is damaging because an adult's identity is closely tied to his or her experience. Learning occurs more readily when the information is relevant to the learner, immediately applied, and problem centered. "Adults become ready to learn those things they need to know and be able to do in order to cope more effectively with their real-life situations" (Knowles, 1984, p. 58). Andragogy stresses collaborative, experiential techniques such as inquiry, labs, and simulations. The role of the teacher is to facilitate learning. "The educator has a responsibility to create conditions and provide tools and procedures for helping learners discover their 'needs to know'" (Knowles, 1980, p. 44). The teacher establishes a physical and psychological climate based upon humanness, including mutual respect and trust, collaboration, authenticity, openness, and pleasure.

Adult learning experiences were supported with lectures, small group discussions, audiovisual presentations, engagement in fieldwork and investigation, documentation of projects, and a culminating event. Consistent with andragogy, we preassessed students' background knowledge and previous experiences and used this information in developing the course. Student decision making and cooperative learning were core components of the experience. The "need to know" was enhanced through hands-on investigation with immediate opportunities to apply knowledge and skills. Students were learning about Reggio Emilia, the Project Approach, and documentation while concurrently engaging in project work. Participating in project work not only created "a need to know" but also an opportunity to reflect upon the experiences from a learner's point of view. Night sessions provided options for viewing videos, discussing issues around the campfire, writing in journals, and revisiting project work. In addition, students were required to complete a precourse information sheet; read books and articles; visit Web sites; complete a precourse paper assignment; keep a daily journal; complete a postcourse plan for implementing the Project Approach in an early childhood setting; and subscribe to an electronic discussion list for the purpose of exchanging information and sharing resources, challenges, and ideas after the course had ended.

Around the campfire.

Our approach to adult learning, andragogy, was consistent with many beliefs and practices espoused by the Reggio Emilia approach and the Project Approach. These practices include the emphasis on cooperation, "learning by doing," making learning relevant and meaningful to learners, and encouraging learner self-direction and control of the learning situation.

Getting Started

The first phase of the course focused on an introduction to the Reggio Emilia approach and the Project Approach. Before the course began, students read *First Steps toward Teaching the Reggio Way* (Hendrick, 1997), *Young Investigators: The Project Approach in the Early Years* (Helm & Katz, 2001), and *Spreading the News: Sharing the Stories of Early Childhood Education* (Carter & Curtis, 1996). As a preassessment, students were given large sheets of paper and markers and were requested to symbolically represent their knowledge of the approaches through pictures, words, and graphs. We reviewed their representations and precourse paper assignment to determine their current knowledge, understandings, and misconceptions, and we adapted course content as needed. During the institute, students were asked to revisit their representations and add to them. Following the exercise, we engaged in a discussion of the history, foundation, and basic principles of the Reggio Emilia approach (Gandini, 1997a; 1997b), followed by a viewing of a video of children investigating a poppy project in a school in Reggio Emilia (*The Creative Spirit;* see http://www.ericeece.org/reggio/regvid.html for information on the video).

The following comments and questions made by students reflected challenges and issues in adapting and adopting innovations to their current settings and situations:

- Can project work be accomplished and still meet all the Head Start requirements?
- How can this approach work with the ratio of children we care for?
- What about using this approach with infants and toddlers?
- We have to submit our themes for the coming year before the children begin. How will this requirement coincide with practices based upon Reggio Emilia?
- We are allowed to have a theme last only for one week. Can I still use this approach?

We noted the students' interests so that we could address them in the next several days.

We shared with students the historical and theoretical similarities and differences between the Reggio Emilia approach and the Project Approach. For example, we examined the principles of the Reggio Emilia approach, including the image of the child; the role of teachers, space, and parents; the importance of relationships, cooperation, and collaboration; issues of time and continuity; emergent curriculum; languages of children; the importance of projects; and the power of documentation. We asked students to reflect upon those concepts that were a part of their programs and noted that many of them originated in the United States through the influences of theorists such as Dewey, Piaget, and Vygotsky. However, through careful observation, analysis, and research, educators in Reggio Emilia have continued to create new ideas related to their teaching (Gandini, 1997a; Malaguzzi, 1998). We continued our discussion by sharing with students that both the Reggio Emilia approach and the Project Approach stress young children's in-depth investigation of topics of interest to them, and we highlighted the purposes and benefits of project work. Project work gives young children opportunities to investigate significant topics, events, and phenomena in their environments worth learning about and helps to strengthen their curiosity and intellectual dispositions as they apply social, scientific, literacy, creative, and numeracy skills. Children work in small groups, identify questions of interest, and find answers to their questions through investigating, doing fieldwork, creating representations, experimenting, and using resources (Katz & Chard, 2000).

Selecting Topics and Documenting Project Work

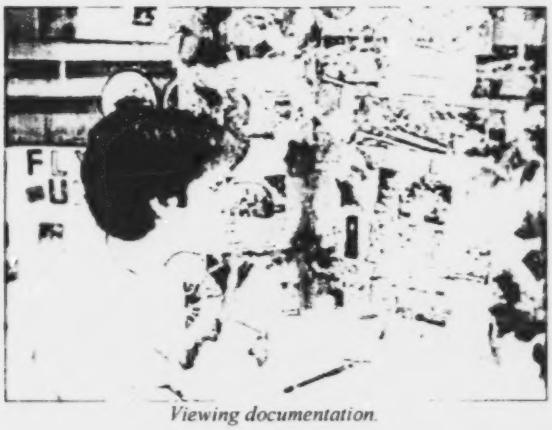
The distinctions between themes and topics were a fairly new idea for many of the students, thus we spent a fair amount of time discussing these differences. We began by asking students to share how activities

and experiences in their settings are currently organized and determined. Following the discussion, guidelines and practical considerations for selecting topics were shared by asking several questions (see Appendix I). We pointed out that topics can be initiated by the teacher or can emerge from children's interest. Because of the context of the setting and the practical considerations of providing the necessary resources, we identified three fairly broad topics in advance of the course: water, rocks, and plants. Students selected the topic of interest to them and divided themselves into groups of four to six to engage in their project work and documentation. In the evenings, students had the option of viewing videos to increase their understanding of projects (e.g., *100 Languages of Children, Setting Sail, To Make a Portrait of a Lion, Amusement Park for Birds, A Message from Malaguzzi,* and *The Long Jump;* see http://www.ericeece.org/reggio/regvid.html for information on the videos).

We next explored ways of documenting children's learning through the use of portfolios and documentation panels. One of the important contributions of the Reggio Emilia approach to early childhood education is the documentation of children's experiences. Documentation focuses intensively on children's experiences, thoughts, and ideas, and documentation may include many forms of representational work, photographs, narratives, and transcriptions of their comments. Although the students had varied experiences with creating children's displays and bulletin boards, taking photographs of children's works, writing narratives and transcriptions, and collecting and displaying children's works, they developed a greater understanding of the depth and breadth of the purposes of documentation.

Katz and Chard (1996) note that documentation supports many important educational processes. Documentation gives children an opportunity to review their accomplishments and achievements; this review can foster curiosity, interest, and confidence. The careful thoughts, efforts, and time required to create documentation convey an important message to children--their work and ideas are taken seriously. Teachers can plan and make decisions based upon the documented interests of children as they engage in their project work. Family and community members can be called upon as "experts" and may come to appreciate the child's experience in school. Teachers' attention is focused on children's interests, thus encouraging modification and adjustment of teaching strategies. Through documentation, children's learning becomes concrete and visible.

During the course, we shared patterns that we have observed over the years of working with students on creating documentation panels. Many students and practitioners begin by creating displays of a special event such as a field trip. The next steps may be to add children's transcriptions to the pictures and a record of several experiences occurring during a project. However, Forman and Fyfe (1998) note that these steps are considered a display rather than documentation because they lack commentary--a critical aspect of documentation. "Commentary frames the data as something more general, some principle that can be applied to new concepts. Display invites pleasure and satisfaction, but is not deliberately designed to provoke hypotheses. Documentation is a research report used to enhance discourse rather than a record of past events" (Forman & Fyfe, 1998, p. 246). Documentation often involves examples of children's questions, work, and transcriptions that capture not only children's skills but also their thought processes. Commentary assists the audience in interpretation. Using this information, students critiqued a large selection of displays and documentation panels.

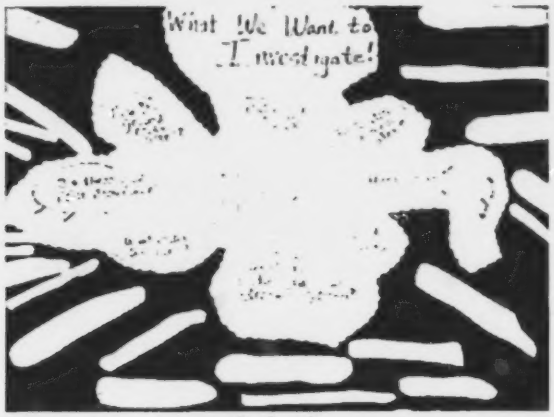


Viewing documentation.

Following the critique exercise, students were introduced to the techniques of webbing and KWHL charts (what we know, what we want to know, how we will find out, and what we learned) to assist in planning and documenting learning. One student stated:

> Webs--I have used them in the past and still use them, but I didn't realize how important they can be to help build concepts and connections for children. In a way, I was just using them for myself to help with planning for investigation and research. When using a web at Birch Creek, it helped our group to focus more. We were able to decide what we wanted to know during our short time. However, over extended periods with children, they can help to integrate topics and connect children's interests. They can help children to have "A-ha" moments, when they get the connections.

Each group developed webs and KWHL charts for the group's project. These webs and charts were used as guides for determining questions and directions for research and exploration. Even though there were two or three groups investigating the same broad topic, questions evolved that were unique to each group. For example, one of the groups examining plants was interested in edible wild plants and their medicinal value. Another group was interested in identifying plants, plotting which plants grew in different locations, and determining the effect of terrain on different plants. Groups continued to revisit and revise their webs and KWHL charts as the week progressed, recording new knowledge, skills, dispositions, and emergent interests.



Rock web.

Students documented their learning throughout the project, presenting documentation panels as part of their culminating event. Photography, using 35-millimeter cameras, was an important part of this documentation. However, when we added digital cameras and color printers, the documentation became richer. Students could immediately see if they had captured the essence of what they wished to

photograph. The instant feedback also sparked new explorations. For example, a group of students took a picture in the rain. The instantaneous picture created a fascination with how other items might look when photographed in inclement weather. Many students expressed appreciation at being allowed to experiment with digital cameras. As one student stated, "As I reflected on yesterday's activities, I was so glad that the digital cameras were available for our use. It was so exciting to be able to take a picture and put it to use right away." In final papers, several participants stated that they had requested digital cameras for their classrooms.

Developing the Project

The second phase of the course focused on developing and investigating the project. During this phase, students delved into exploring and finding answers to their questions of interest by spending several hours in the outdoors and, in the process, identified new questions that required further explorations and revisiting. Children (and adults) need to practice and use many skills while engaged in project work, such as asking questions, locating and using resources, observing, sketching on field trips, taking photographs, constructing representations, and using tools and media (Helm & Katz, 2001). Therefore, we wanted to provide the students with many opportunities to experience and practice these skills.

Heading out to explore.

Looking at natural vegetation.

Checking the water depth.

Looking for pond life.

Fieldwork and investigations were a critical component of the course. Each day, students were given the opportunity to answer questions from their web or KWHL chart through visiting and revisiting areas of interest. Because questions varied, so did the experiences. Groups might be outdoors with sketchpads drawing, taking pictures with digital cameras, collecting samples, vividly exploring rocks through rock climbing, swimming in an ice-cold mountain lake, graphing different phenomena, or following a stream to its source. Revisiting was a new concept to many of the students; therefore, we discussed the value of revisiting as a way to gather new information, confirm hypotheses, and observe the same place under different conditions.

Exploring rocks and water.

Collecting water samples.

Modeling Reggio Emilia and Project Approach practices, we established a studio to provide opportunities to represent learning and to explore concepts and ideas through a variety of creative media. The studio was practical, aesthetically pleasing, and well stocked with a variety of materials (see Appendix II). Long tables, covered with tablecloths, contained baskets of art media and materials needed for exploration and investigation. Other tables contained resource books to investigate questions, and computers and color printers to assist with documentation.

Art materials.

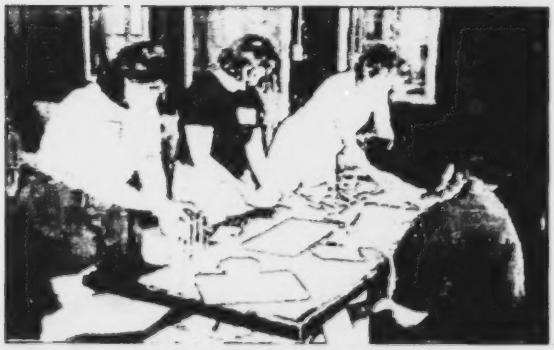
Materials displayed in baskets.

Resource table.

Students spent many hours in the studio, investigating, documenting, and exploring. Several students had limited exposure to art media such as watercolors, wire, charcoal, or earth clay. Spontaneous lessons often occurred as students taught techniques and shared knowledge with one another.

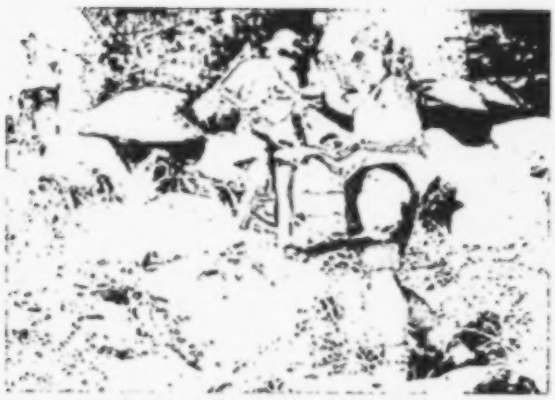
Practicing with watercolors.

Exploring shading with watercolors.



Working on a group project.

In addition to firsthand experiences, we provided many other resources for answering questions. the emergent nature of projects, combined with the lack of phones, Internet connections, libraries, and the one-week time period, made it difficult to always have the research materials and experts the groups desired. Because of these limitations, groups were innovative in locating additional resources by conducting interviews with members of the Birch Creek staff, looking for others in the class who might have the knowledge they desired, and taking advantage of the visiting experts. For example, when a geologist came to give a presentation to another class sharing the setting, members of the rock group interviewed him. Through combining their previous knowledge with exploration at several rich geological areas and investigating their questions using research materials, they had developed a theory for what had caused a particular phenomenon. As one student stated, "It was a wonderful feeling having our theories confirmed by a specialist. It made us grasp the effect the Project Approach would have on children. It is a wonderful, fulfilling, and self-confirming approach." Another group, also studying rocks, became interested in rock climbing. They were able to locate an expert who took them rock climbing and taught them the skill of belaying. As instructors, we had struggled with what to provide in resources, not wanting to limit projects by selecting the experts in advance. We continue to believe that the direction of the project must emerge from the interests within the groups.



Exploring the geological landscape.

Discovering how rocks are formed.

During the weeklong experience, students kept journals of their thoughts and reflections. Even the evening campfires created opportunities for reflection, with the journal creating the catalyst to take treasured time to reflect and record. One student wrote:

> We went up to the campfire but did not really join in. I still don't know why--tired I suppose or still not able to overcome my hesitation about singing--although I always sing when I am alone. Another aspect of respecting children--if they don't want to participate, encourage but don't insist.

Journaling.

Each day proceeded with students learning about project work as they were experiencing it themselves. This emergent process was very difficult for those students who were used to traditional approaches to learning. Pleasing the teacher, doing everything the "right" way, emphasis on a final project, and grades permeated some students' thinking. One student documented this struggle in her journal:

> My frustration level is growing. I am still not fully understanding the process. I feel a need in my learning to know the whole process and what is our end project going to look like. I want to skip exploring, research, documentation, etc., and just start to work on the panel. It's been hard for me to just lay back and follow the process.
>
> Today, I am feeling better about the process. We actually started creating some of our documentation and lining up our panel. This has been a GREAT experience doing this process one step at a time. I now feel I am understanding the process more. I feel we may be jumping around the stages a little, but I am learning so much.
>
> I am frustrated again today. I am learning the process, but every time I think I know what I am doing, I learn something different. I am really learning. I enjoy this way of learning, although I am very frustrated.
>
> Well, it's done--how wonderful it is to have finished such a wonderful project. I still have that feeling, "Did we do it right?"--part of my personality, my insecurity for learning, and need for perfection.

To support learning, daily discussions and mini-lectures covered various aspects of the Reggio Emilia approach and the Project Approach, including the barriers to implementation. One of the barriers identified was meeting educational standards. To assist students in exploring this concern, we provided Head Start outcomes, standards from professional organizations, and state standards for K-3 grades. In small groups, students examined the standards and determined ways to meet them using project work. We were surprised to find that in many cases these active practitioners had not seen the standards that governed their programs and had only received interpretations from a supervisor. This exercise was followed by a discussion about where rules and standards originate, program requirements versus state and federal requirements, and the ability to act as a change agent based upon the origin of the requirement. We referred students to articles that would assist them in examining these issues (see Schuler [2000], http://ecrp.uiuc.edu/v2n1/schuler.html; and Helm & Gronlund [2000], http://ecrp.uiuc.edu/v2n1/helm.html). Several students commented that they could definitely see how to meet and exceed the standards governing their program while implementing practices based upon Reggio

Emilia and project work.

Cognitive Discourse

As the students engaged in the process of learning, conflict among some members of the groups began to emerge. Although the students believed that it was important for children to get along with one another and to support and guide them in the process, when they did not get along, some had a difficult time applying their beliefs and practices to members of their group. A few members stated:

> I felt like there was a dominant group member who did not value my opinion or my work--at least that is how it felt to me. Unfortunately, I had trouble expressing myself to her. I am a pretty quiet person, and I did not want to cause any hard feelings among us because we were working together on the same project. I definitely have trouble leaving my comfort zone.

> One of my biggest challenges was not being listened to. I felt like some people in our group were trying to make all of the decisions without taking everyone's ideas into account. I discovered that it was difficult for me to speak up and express myself and my concerns.

> Certainly, the group work was challenging for me. I especially had a difficult time when it came to summarizing the experiences and pulling together the documentation. I have very definite ideas and feel strongly about them. I like to keep focused on the topic and course expectations, and I feel resentment from people for ruining the fun.

Disagreement among adults was not a part of their culture; therefore, the tendency was to avoid conflict and not address the conflict when it occurred. Some students confided concerns privately to the instructors and in the journal writing.

We shared with the students that teachers in Reggio Emilia schools view intellectual conflict as an enjoyable process, involving negotiation that leads to growth (Jones & Nimmo, 1999; Nimmo, 1998). For example, one component of negotiated learning is that of discourse, whereby teachers struggle to understand each other, experience conflict, and reflect upon various perspectives (Forman & Fyfe, 1998). Students were surprised to learn that while engaged in discourse, the teachers in the Reggio Emilia schools argue and raise their voices. In addition, teachers value sociocognitive conflict among children and focus on ways to increase opportunities for them to experience conflicting and confusing perspectives. By creating "disturbances" in the environment, teachers can support the challenges occurring among children while providing them with opportunities to "revisit, revise, and review their theories and hypotheses" (New, 1998, p. 272).

We continued to grapple with the conditions that were needed to support conflict among the students. We worked hard to model democratic participation, collaboration, and conflict resolution. For example, we have different teaching styles and points of view, do not always agree but listen carefully, and respect each other. We encouraged the students to reflect upon their conflicts (e.g., Are you listening to the voice of each member of your group?); suggested that they engage in dialogue, debate, and discourse; and trusted that they would work toward negotiating issues of concerns. A few members shared:

> Teachers must work hard to feel comfortable with conflict in order to build a sense of community and cohesion among themselves and children. To do so, I must discuss and negotiate. I am working on it and will continue to do so.

> By taking time to really talk with a person in my group about an issue that at first we did not agree upon, and listen and reflect, I began to change my belief and found that it was closer in line with hers. I began to reach a different level of understanding, and in doing so, it reaffirmed the importance of discourse and negotiation.

> I have thought a lot about my work and interactions with children. Sometimes when I request that a child do something that I think is reasonable and he or she resists, I get frustrated. Now I am experiencing feelings of frustration because a group member is requesting that I do something that I

> do not want to do. Experiencing this resistance in me has really made me think about the power that I sometimes try to exert over children.

These experiences stimulated our thinking on how to continue to address issues of collaboration and conflict among the students the next time we teach the course. We want to highlight the "necessity" of conflict within groups; encourage the use of conflict resolution strategies; support collaboration; and provide time for processing thoughts through debate and disagreement, through discussion, and in journal writing.

Concluding the Project

The final phase of the course focused on the culmination of the students' weeklong project work. During this phase, many benefits to the adult learners emerged. They viewed themselves as learners and gained confidence in engaging in emergent learning based on their interests rather than on predetermined themes. They delighted in their abilities to investigate phenomena of interest, answer questions, and solve problems. They articulated and summarized what they had learned by consolidating and integrating their shared experiences.

Culminating event.

On the final day, groups presented their projects and documentation to the large group. One student reflected, "It's early morning, and I'm sitting at our project's central piece, contemplating the next step. We have truly put our hearts and souls into this experience, I feel. The next step is just so exciting! Having people check out our work and discuss it. I hope it causes at least one person inspiration for their next project." Because the projects varied, so did the culminating events. Acting out the events that caused the current area geographic conditions, reproducing a rainstorm, identifying plants, rock rap with rock instruments, and an edible plants' feast were a few of the events in which we all participated.

Geologic dramatization.

The groups had bonded, sharing intense experiences together away from families, televisions, phones, shopping centers, and day-to-day responsibilities. They had communed with nature, learned new concepts and ideas about Reggio Emilia, the Project Approach, documentation, and their project of choice. Many had taken new risks, uncovered hidden talents, and learned new things about themselves as reflected in their journal writings:

> I can sculpt and I've never done that before.
>
> I learned to trust my potential, to allow myself to explore the present moment to the fullest, with wonderment and joy. By discarding the boundaries of time, expectations, the past and the future, I became fully aware of how learning can be a process, rich with joy, full of depth and inspiration, and most importantly a resource for sharing, communication, and bonding.
>
> I learned acceptance, tolerance, respect, teamwork, and to be resourceful.

Although tired after an intense week, many were sad to leave. "We're almost done. Is that a bit of sadness I am sensing in all the women here this morning? Anxious to go home, yes, but still a little sadness. I'm anxious to get home although I believe this experience will turn out to be one of those memories I choose to revisit in quiet moments."

Final Reflections

After the completion of the course, we spent time reflecting upon and discussing our experiences. We enjoyed the opportunity to engage in a collaborative approach to teaching adults in an intensive setting. At times, we took responsibility for organizing and sharing content and topics of interest to each of us, while at other times, we shared information in a collaborative manner. We particularly enjoyed meeting regularly with students in small groups, getting to know them as individuals, learners, and professionals. Further, we debated issues with each other and with the students and role-modeled our different, yet complementary, styles of teaching.

Through careful observation, interactions, and written feedback, we learned many things about and from the students. We noticed that the majority of them became fully engaged in the course and in their group project work, often working late into the night. As one student shared, "By having large blocks of time and continual access to the professors and peers, the course provided a deep sense of learning about engaging in project work and documenting our experiences." Many students shared that they believed they gained a much richer and deeper understanding of the content in the intensive format because they were focused, engaged, energized, inspired, and lacked "outside distractions." Another student shared, "Even though we were under the pressure of time (because it was an intensive), we were given freedom to explore and because of that, each one of us made the most out of the present moment. The terminology 'intensive' is highly appropriate because I used my cognitive, creative, and social skills to the fullest; much more than I would have during the course of a semester!"

After the completion of the course, we continued to remain in contact with many of the students. We observed them in their early childhood settings, corresponded through the electronic discussion list, and received feedback from a survey reporting changes to their classroom settings based upon their learning in the course. We learned that many of them continue to work toward implementing their "first steps" (Hendrick, 1997) in creative and varied ways. For example, in several of our observations of early childhood settings, we saw examples of webbing and KWHL charts; children working together in small groups on their projects and creating representations through drawings, wire and clay sculpting, and watercoloring; teachers using digital cameras and recording narratives to document children's work; and rich documentation displayed in entryways and classrooms. In other settings, teachers had moved from using predetermined yearly themes to an emergent curriculum that included project work; revised their schedules to provide for longer blocks of time and rearranged their spaces to provide for larger areas for children to engage in project work; and introduced new materials to the children such as "loose parts" (Weisman Topal & Gandini, 1999), mirrors, and baskets full of natural materials to touch and explore.

Interestingly, at the beginning of the course, we received an unanticipated request from one student who was particularly interested in audiovisual technology and wanted to document the course. We were happy to support and encourage her interest, and we all enjoyed sharing our collective experiences with her. She has recently completed a professional editing of the tape, which she titled *Creativity and the Young Child: An Adult Learning Experience*, and plans to use it in a session at the state early childhood conference.

Responses from the student surveys also provided us with some interesting insights. One teacher shared, "The institute helped me to become a better team-teacher. I have really enjoyed working with the staff and becoming involved with the children on a whole new level. It is so rewarding to observe them, talk about their interests and questions, and figure out how to meet their needs through project work. The children and families are really engaged."

Another respondent to the survey shared, "I have used my knowledge from the summer course to conduct training sessions for early childhood educators on project work and documentation. My co-teacher and I utilized our knowledge to guide our teaching whereby participants engaged in their own mini-projects and experiential learning. Knowledge should be transformative, and I am pleased to say that the summer course assisted me in that outcome!"

Other participants discussed difficulty implementing the approach. In some programs, frequent turnover in staff creates a continual state of crisis, making it difficult to implement any new approaches. In others, the increased emphasis on outcomes and standards has made directors fearful of trying anything new. Others students have become discouraged when they tried to implement too many new ideas at once. As one student stated:

> It's not very often I get this excited and optimistic about returning to the classroom in the fall. The great ideas that have flowed in this atmosphere have been stimulating. I don't know if I can get any more excited and inspired without spontaneously combusting. I think that I'm going to have to rein myself in a little bit. I'm getting the urge to go back and do the best and be the best, but I need to go slowly. I do not wish to become discouraged or burnt out.

We've observed that those who have been most successful in implementation have a stable setting, open-minded director, and co-workers who are also interested in the approach. In many programs, staff who have previously attended the course encourage others in the program to enroll. In these programs, we witness continual growth in implementation.

The course itself emerges each time we teach it, based upon the background knowledge and interests of the participants and also upon the collective knowledge of the profession and ourselves. As observers and participants in the course, we continually reflect upon what we will do differently the next year. For example, after witnessing the conflict that occurred in groups over the years, we addressed conflict this year by discussing the notions of collaboration, conflict, discourse, and change; establishing a peace table; developing group-building activities; and revisiting communication tools such as "I" messages, reflective listening, and conflict resolution.

We continue to reflect upon and ask many questions. How can we continue to support the student in implementation of project work? Should we be including information about the change process in the course? Can we continue to provide experimentation as a basis in other early childhood courses? What coursework lends itself best to an intensive format? Are intensive formats more conducive for some students than others?

As professors, we have experienced the value of collaboration and conflict, the challenges in "trusting in the process," and experiential learning in an intensive setting. We modeled team-teaching, discourse, and "practicing what we preach." As stated by one student, "We too, want to become advocates, educators, facilitators, and lifelong learners in our quest to put into practice the Project Approach to teaching." We share our experience not because we believe that our course should be replicated, but because we hope that by telling our story others may find aspects that will inspire them to examine course development and implementation in their respective settings.

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Appendix I
Guidelines and Practical Considerations for Selecting Topics

Is the project concrete, interesting, and relevant to the children?

Is the project dense in potential meanings, both emotionally and intellectually?

Are children treated as serious investigators? Does the project allow children to learn and apply basic skills and dispositions (that are consistent with national standards)?

Is the project rich in possibilities?

Does the project allow for varied activities during different parts of the day?

Is the project able to sustain long-term interest?

Is there potential for representation in a variety of media?

Is the project sensitive to the cultural context of children and families?

Is the project familiar to children?

Is the teacher knowledgeable about the topic?

Are there ample resources available?

Does the project lend itself to being emergent and negotiated?

Appendix II
List of Materials Included in the Studio

Clay-earth and modeling
Clay tools
Colored wire
Wire
Wire cutters
Pliers
Cotton balls
Metallic shredded paper
Markers
Watercolors
Watercolor pencils
Watercolor boards
Watercolor brushes
Watercolor trays
Colored pencils
Colored chalk
Pencils/pens
Pencil sharpener
Charcoal
Pipe cleaners
Crayons
Tempera paints
Paint containers
Oil pastels
Felt
Foamees
Fabric
Needles and thread
Toothpicks
Colored Popsicle sticks
Scissors--plain and decorative
Mat board
Charcoal paper
Tissue paper
Watercolor paper
Tracing paper
Assorted colored copy paper
Assorted construction paper
Waxed paper
Tinfoil
Butcher paper
Manila paper
Computer printing paper
Yarn
Glue sticks
Glue gun
String
Elmers glue
Plastic and glass jars
Staplers
Paper punch
Assorted tapes
Pushpins
Box knife
Rubber cement
Mounting tape
Double stick tape
Food coloring
Magnifying glasses--assorted types
Buckets
Rulers
Trowel
Eye droppers
Nets
Geology magnifying glasses
Computer
Reference disks
Ink jet paper
Computer disks
Digital cameras
Color printer
Lens cleaner
Clipboards
Journals
Baskets
Tablecloths
Resource books
Forest service posters
Songbooks

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The Apple Project

Debra Danyi, Heather Sebest, Amy Thompson, & Lisa Young
Manor Avenue Annex, Struthers Elementary School, Struthers, Ohio

Abstract

Four kindergarten classes in an Ohio elementary school chose to study apples as a group project. This article discusses how the project evolved, describes the three phases of the project, and provides teachers' reflections on the project. Photographs taken during the project are included.

School and Student Background Information

Manor Avenue Annex was a one-year temporary site for four kindergarten classes while the new Struthers Elementary School in Struthers, Ohio, was being constructed. The temporary site was located in the basement of a local church. The environment consisted of one large open room with no walls dividing the four class areas. This environment presented many challenges. Since there were no divisions between the classrooms, the noise level became overwhelming at times. Therefore, we created a shared daily schedule in an effort to teach louder/quieter activities simultaneously. For example, the children from all four classes engaged in project work during the same time period. There were 83 children, four certified classroom teachers, three instructional aides, one college student, and many parent volunteers.

The children attended an all-day, every-day kindergarten program. The Apple Project was their first experience with project work.

Preliminary Planning and Selection of the Topic

We teachers chose to initiate a project on apples based upon the current seasonal events. The project took place during the fall when apples are plentiful in Ohio. The children were already interested in this topic as evidenced by the numerous apples and apple treats that were being brougnt to school daily. There are

several orchards located nearby, and most of the children had had prior experiences at the orchards with their families or preschools.

As we teachers began discussing the Apple Project, we brainstormed possible opportunities for hands-on investigations that met curriculum requirements. We also talked about available resources that would help the children investigate apples. At the conclusion of our discussions, we felt that "apples" was a worthwhile topic.

Phase 1

Phase 1 of a project generally includes discussions with the children in order to find out what prior experiences they have had with the topic and what they already know about the topic. We encouraged the children to represent their prior knowledge of apples through drawings, constructions, dramatic play, etc. We helped the children to generate questions to investigate and created a topic web. A letter was sent to parents explaining the project and inviting parent participation.

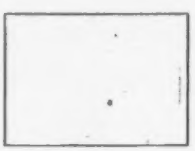
A letter was sent home to parents describing the project.

Activities

On average, the project work took place three times a week. All four teachers and all of the children were involved in the project work. However, not all of the children participated in every activity. The children selected activities according to interest. Furthermore, the children from the different classes intermingled with each other throughout the project. The following activities took place during Phase 1 of the Apple Project:

- Drawings representing prior experiences
- Class discussions about apples
- Sketches of apples
- Lists of descriptive words and phrases
- Creation of a topic web
- The gathering of apple-related literature

We encouraged the children to share their prior experiences with apples by engaging them in discussions about apples. We began the discussions by sharing personal experiences with apples. The children naturally started sharing their own personal experiences. The children then depicted their experiences through drawing. We transcribed the children's dictations.



The teachers transcribed the children's experiences related to apples.

The following excerpts were taken from the discussions that led us to the development of questions to investigate in Phase 2 of the project.

What is an apple?
Michelle: "It's a circle with a stem and a leaf."
Abby: "Something you can eat."
Mike: "An apple is a fruit."

How do you know that it's a fruit?
Mike: "Because it's more colorful than a vegetable and it has juice."

Do vegetables have juice?
Selma: "No."
Mike: "Well carrots have a little."

Describe an apple.
Heather: "It's red and hard."
Tina: "It's round."
June: "It has skin."
Jennifer: "It is white inside it."
April: "It grew out of a seed."
Michelle: "They change colors--red, green, and yellow."

Do you think that one individual apple changes from red to green to yellow?
Michelle: "Yes."

What is a seed?
Jeff: "Like ordinary seeds, they are in apples. But seeds are things you plant things with. If you plant a black seed from a apple, it might grow a apple tree."

Would you like to try that?
Eric: "Yes."
Jeff: "It would take a really long time, like 5 or 10 years."

What are apples used for?
George: "To eat."
Robin: "You can pack it for lunch."
June: "To make apple cider."
Matthew: "They are used to make apple sauce, apple pies."
Mindy: "Apple juice."
Adam: "Apple cake."
John: "Apple salad."
Eric: "Apple syrup."
Andrew: "For dunking and catch them with your mouth with the stem on it."
Mary: "It keeps you healthy."

Where do apples come from?

Mike: "Trees and the trees come from orchards."
Alice: "Apple farms."
Donny: "Stores like Sparkles."

How do they get on the tree?
Eric: "They turn into little ones that are green then they turn into big ones."
Amy: "They grow."
June: "They grow. First they grow into little buds and then they turn into apples."
Matthew: "They come from seeds."

How do they get to the store?
Robin: "The truck driver picks the apples, washes the apples, then puts them in a box. The truck driver drives them and gives them to the grocery shop."
Mary: "They pick them and put them in boxes and take them to the store."
Jeff: "A farmer picks them."
Lorie: "When the apples are on the trees, they can get a ladder and pick them off the tree."
Matthew: "They ride a tractor from a farm and then they go to the store."

What colors are apples?
Eric: "Red."
Jeff: "Green."
Mike: "Yellow."
April: "Sometimes half red and half green or half red and half yellow."
June: "Brown when they are rotten."
George: "Orange." (The teacher wanted to say that apples are not orange, but she refrained.)

How do they taste?
John: "Sweet."
Robin: "Juicy."
Andrew: "Sour."
Keith: "Yummy."
Roger: "Very delicious."
Abby: "Good."

What would you like to learn about apples?
April: "How are apples made?"
Matthew: "How long does it take to grow an apple tree?"
Joe: "How they make apple cider?"
Melissa: "Why do worms crawl in them?"
Marcy: "How do they get a juicy taste?"
Tina: "Why do they taste so good?"
Eric: "How do you make apple juice?"
Mike: "How do you take the juice out of foods?"
Abby: "How do you make candy apples?"
Carl: "How do they get up in a tree to pick them?'
June: "Why do apples change to brown when they get old?"
Jackie: "I wonder why apples taste so different?"
Amy: "How do they go to the grocery store?"
Mary: "How do they turn red?"
Kimberly: "How do they turn yellow?"
Tony: "How do they turn green?"

The children chose an apple and made still life sketches of the apples.

Children chose apples and sketched them.

The children brainstormed a list of descriptive words and phrases about apples:

- different colors
- stem
- leaf
- shiny
- seeds
- juicy
- taste good
- sweet
- polka dots
- sour
- hard
- crunchy
- apple starts with A
- used to make foods
- circle shape
- oval shape
- tooth shaped
- skin
- bumpy bottom
- grows on trees

We created a topic web.

The teachers created a topic web related to apples.

We provided apple-related literature for the children to explore. The following is a list of apple-related literature for children:

Apple-related literature was displayed in the classroom.

Reflections on Phase 1

We, the four teachers, had varying levels of knowledge about the Project Approach. Two of us had been involved in a grant-funded Reggio Emilia study group for four years, and one of us was involved in the group for three years. The other had recently joined the study group. Furthermore, two of us had never experienced a project from start to finish and were nervous about "doing it right." We found the book *Young Investigators: The Project Approach in the Early Years* by Judy Harris Helm and Lilian Katz to be very helpful. It is an excellent resource for teachers who are interested in the Project Approach because it walks the reader through all the steps of a project.

We were excited about the children's interests and the questions that were generated. We also found the documentation to be useful. It was beneficial for us to read the documentation back to the children. The children were very interested in their own words. Furthermore, revisiting the discussions helped to maintain and spark the children's interests.

Phase 2

Phase 2 of a project typically includes fieldwork and visiting experts. It is also a time when teachers provide the children with resources such as relevant real objects and books. The children prepare for interviews and investigate initial questions. They represent their knowledge by observing and recording their findings, drawing, constructing models, predicting, conducting experiments, dramatizing, and discussing. A letter was also sent to parents explaining Phase 2 of the project.

A letter describing Phase 2 was sent to parents.

Activities

The following activities took place during Phase 2 of the project:

- Fruit vs. vegetable experiment
- Clay representations of apples and apple trees
- Seasonal apple tree representations
- Sink or float experiment
- Bobbing for apples
- Taste graphing
- Planting of apple seeds
- Apple prints
- Field trip to a fruit farm
- Take-home apple survey and graph
- *Apples Up on Top,* a class-made book
- Oxidation experiment
- Johnny Appleseed information
- Student resources

Fruit vs. Vegetable

During Phase 2 of the project, the following discussion took place:

> Teacher: What is an apple?
> Sam: It's cold.
> Mike: A fruit.
>
> Teacher: How do you know that it is a fruit?
> Mike: Because it is more colorful than a vegetable and it has juice.
>
> Teacher: Do vegetables have juice?
> Selma: No.
> Mike: Well carrots have a little.

From this discussion, an experiment emerged. We needed to find out what a fruit was, what a vegetable was, if fruits have juice, and if vegetables have juice.

> Teacher: What is a fruit?
> Mike: It has more juice than vegetables.
> Matthew: It's juicy.
> Eric: They are different than vegetables. They're growed from trees and vegetables are growed from plants.
> Betty: They're nice to eat.
> Alice: They're round.
> Mike: Some are shaped like ovals like watermelon.

Teacher: What is a vegetable?
Michelle: Carrots, carrots are pointy.
Denise: Green beans.
Amy: A plant that grows under the ground.

The children chose two kinds of fruit (an apple and an orange) and two vegetables (a carrot and a potato) for our experiment.

Teacher: I have four foods. How can we see if they have juice inside? How can we get the juice out?
Eric: Smash 'em.
Amy: Squish it.
Bob: Step on it.
Bill: Use a hammer.
Charles: Throw it on the ground.
Eric: Poke a hole in it and squeeze it.

From these suggestions, the children chose three methods for extracting juice: (1) throwing the fruit or vegetable on the ground, (2) poking a hole and squeezing, (3) using a hammer. The children then tried all three methods on the apple, orange, carrot, and potato.

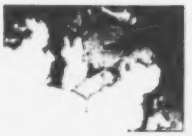
Results

Apple--dropped: a little juice
Apple--poked and squeezed: a lot of juice
Apple--hammer: a lot of juice
Orange--dropped: a little juice
Orange--poked and squeezed: a lot of juice
Orange--hammer: a lot of juice
Carrot--dropped: no juice
Carrot--poked and squeezed: no juice
Carrot--hammer: a little juice
Potato--dropped: no juice
Potato--poked and squeezed: no juice
Potato--hammer: no juice

Conclusions

Mike: Vegetables don't have juice.
Eric: The hammer and the carrot had a little juice.
Mike: But not as much as the fruit.

After the experiment, we looked up "fruit" and "vegetable" in our children's encyclopedias. From the encyclopedias, we learned that fruits have seeds and vegetables do not.



The children experimented with fruit and vegetables.

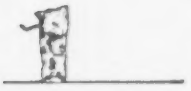
Clay Representations

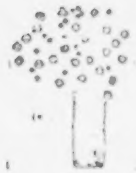
The children made apples and apple trees out of clay.

The children made apples and apple trees out of clay.

Seasonal Apple Tree Representations

After reading *The Seasons of Arnold's Apple Tree* by Gail Gibbons, the children worked in groups to create representations of how an apple tree would look during each season.





The children represented how apple trees would look during the four seasons.

Sink or Float Experiment

The children conducted a sink or float experiment. The children predicted whether an apple would sink or float. They wrote their name under their predictions on the record sheet. After the children made their predictions, they put an apple in the tub of water. It appeared to sink. One of the children suggested testing a pumpkin to see if it would sink or float. The child went to the Nature Exploration Table, which was located in the classroom science center, and brought back a small pumpkin. Again the children made their predictions for the pumpkin on a separate record sheet. After the predictions were made, the children tested the pumpkin in the water and it seemed to float.

> Teacher: Why do you think the pumpkin is floating and the apple is not?
> Michelle: Because the pumpkin is fat and it holds up the pressure of water. The apple keeps sinking because it is too skinny.

The teacher did not feel that there was enough water in the tub to accurately show the results; therefore, she asked the children to put more water in the tub. To the children's surprise, the apple rose up from the tub and floated. The children became very excited about the change in results. Now that there was more water in the tub, the children re-tested other apples and the pumpkin. All of the apples and the pumpkin floated.

> Teacher: Why is the apple that sunk before now floating?
> Robin: The first time the apple sunk because we did not have enough water, and the second time it floated because we added more water.
> Mike: There is more water so the fruits don't reach the bottom and sink.
> Jennifer: The pumpkin and all of the fruits together float, and none of them touch the bottom because all of them are fruits.
> Missy: One apple is red, one is greenish, one is yellow, and one pumpkin is orange. Every color of fruits floats.

The children were so interested in the experiment that they wanted to do the experiment again the next day. One child used the Internet to find out why apples float. The child discovered that the reason that fresh apples float is because 25% of their volume is air.

The children tested whether apples and pumpkins would sink or float and recorded their predictions and results.

Bobbing for Apples

When we posed the question "What are apples used for?" one child responded by saying that they are used for dunking and that you catch them with your mouth by the stem. We decided to bob for apples in order to test his hypothesis. The children also came up with alternative ways to bob for apples. For example, Pete discovered that if you push an apple down to the bottom of the tub you could grab it with your teeth.

The children came up with alternative ways to bob for apples.

Taste Graphing

The children were interested in the wide variety of apples and why they tasted so different from each other. The children participated in an apple-tasting experiment. The children sampled a red apple (Red Delicious), a green apple (Granny Smith), and a yellow apple (Golden Delicious).

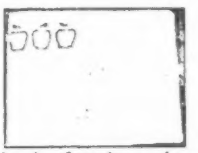
Teacher: How did the red Red Delicious apple taste?
Bob: I liked it.
Carol: Good.
Melissa: Yummy.
Kevin: Sweet.
Trevor: It was good and juicy.

Teacher: What did the green Granny Smith apple taste like?
April: Sour.
Alice: It was good.
Melissa: Sour, but good.
Trevor: Great.
Kimberly: I like it.
Tina: Very sour and juicy.
Bob: Sour.

Teacher: How did the yellow Golden Delicious apple taste?
Carol: I liked this apple.
April: Juicy.
Kevin: Good.
Kathy: It was good and juicy.

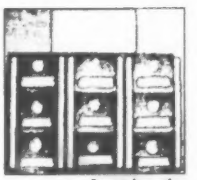
Trevor: It good and juicy.
Kimberly: Sweet.
Tony: It was good.

The children recorded which apple they liked best on a graph. As a whole, the children liked the green apple the best.



The children tasted three kinds of apples and recorded their preferences.

The children also had the opportunity to sample several other apples that were donated by the fruit farm.



The children tasted a variety of apples donated by a fruit farm.

Planting

The children were interested in planting apple seeds, but first we had to determine how to get the seeds out of the apple.

Teacher: How can we get the seeds out of the apple so that we can plant them?
Tom: Cut the apple.
Gabe: Pick the seeds out.
Marcy: Get them out with your nails.

The children removed apple seeds for planting.

Once the seeds were out, the teacher asked: What do we have to do to get the seeds to grow?

Adam: Let the seeds in the sun.
Selma: Plant them.
Tom: Give them water.
Roger: Soil.

The teacher found an experiment on how to plant seeds using a jar and paper towels. The children decided that they wanted to try this experiment as well as plant them in soil.

The children planted the apples seeds that they had harvested.

The teacher asked: Do you think that the seeds will grow in the paper towels?

Carl: No, because they don't grow on paper towels.
Keith: No, because they won't have sun.
Seth: Yes, because of the water.
Mary: No, it needs soil.

The children observed the seeds daily over the course of the year. This experiment was unsuccessful. The seeds did not sprout.

Apple Prints

During the reading of the folk tale *The Little Red House,* the teacher cut an apple in half to reveal the star made from the seeds. The teacher then put the apple in the art center in order for the children to capture the star print. The prints were then used to communicate the finding to others.

The children made star prints from the apples.

Field Trip

We set up a field trip to White House Fruit Farm. Before they went on their field trip, the children formulated questions that they wanted to ask the tour guide:

Teacher: What questions do you want to ask the tour guide at the apple farm?
Tom: Why are some apples hard and some apples soft?
Amy: Why do apples have all different names and signs on the apples?
Marcy: How do you make apple cider?

Betty: How do the apples come off the tree?
Paul: How do they grow? How do flowers grow to make apples?
Abby: How do they get to the grocery store?
June: Why do some apples grow big and some apples grow small?

The children were responsible for asking the tour guide their questions. We wrote down the children's questions in case they forgot what they wanted to ask. We also wrote down the answers to the questions the tour guide gave them:

Children: Why are some apples hard and some apples soft?
Guide: All apples are hard at first. The reason that they turn soft is because they have been stored incorrectly in the wrong temperature and moisture.

Children: Why do apples have all different names and signs on the apples?
Guide: Because there are so many different varieties with different tastes and purposes, people would not be able to tell them apart when purchasing them. So names were given to them and stickers with their names are placed on them for easy identification at farms and grocery stores. Also names get combined when two apples get combined to make one new variety of apples. For example, when a Macintosh apple and a Jonathan apple are combined, the new name for this variety is Jonamac.

Children: How do you make apple cider?
Guide: You take the apples to a machine that smashes them to drain their juice.

Children: How do the apples come off the tree?
Guide: They have pickers (people who pick the apples) at the farm who go out when the apples are ready to be picked. They wear a basket around their waist, and as they pick the apples, they put them into their basket. They also have a long pole that they use to reach the high ones.
Children: How do they grow? How do flowers grow to make apples?
Guide: Bees pollinate them by moving from flower to flower.

Children: How do they get to the grocery store?
Guide: After they are picked and put into storage bins, most of the apples are sold right here at our store. But if stores want to buy them, big trucks come and take them to the store.

Children: Why do some apples grow big and some apples grow small?
Guide: When there are a lot of apples on a tree, they grow smaller because there is not enough room to grow. And the apples that are larger receive more moisture and sunlight and therefore they grow bigger.

Teachers created a display documenting a field trip to Whitehouse Fruit Farm.

Take-Home Survey

To encourage family involvement, the teacher sent home a survey to determine what kind of apple products the children had in their homes. The children and teacher made a graph to organize the information. The graph revealed that most children had fresh apples in their homes.

The children took home a survey to determine what kind of apple products they had in their homes.

Apples Up on Top

During the project, the children were read many fiction and nonfiction books about apples. After listening to a reading of the fiction book *Ten Apples Up on Top* by Theo LeSieg, the children made their own book. Furthermore, the children experimented to see how many real apples they could carry up on their heads.

The children made their own book after reading Ten Apples Up on Top.

Oxidation Experiment

The following experiment took place after the children had apple slices for a snack. The apple slices turned brown. The children decided to do an experiment to find out if they could stop an apple from turning brown. We found an oxidation experiment that involved using water, grape juice (we substituted berry juice), and lemon juice. The children predicted which liquid they thought would stop the apple from turning brown:

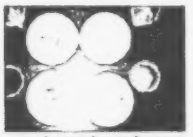
Seth: Berry juice.
Shelly: Water.
Anna: Lemon juice.
Mike: Water.
Steve: None.
Abby: Water.
Selma: Lemon juice.
Millie: Water.
Carol: Water.

Sam: Water.
Ann: Water.

Next, the children dipped a different apple slice in each of the three liquids. The children did nothing to one apple slice. The children let the apple slices sit for 30 minutes and then compared the slices.

Results

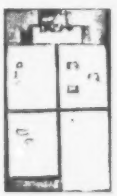
Nothing (air): turned brown
Water: turned light brown
Berry juice: turned the darkest brown
Lemon juice: stayed white



The children conducted oxidation experiments.

Student Resources

Throughout the project, the children provided resources to aid in the investigation of the project. For example, information from the Internet was brought from home. They also brought in real apples, apple tree branches, and an apple robot.



The children brought in resources to aid in their investigation of apples.

Reflections on Phase 2

In Phase 2 of the project, it was evident that the Project Approach truly integrated the curriculum. It allowed the children to apply and practice skills in every subject area. Furthermore, it allowed the children to develop and apply higher-order thinking skills. The Project Approach also encouraged cooperative learning.

The field trip provided the answers to questions that the children had not been able to answer during their classroom investigations. However, in the future, we decided that we would send the questions in advance so the tour guide would be better prepared. We also would have had the children predict the answers to their questions before we went on the field trip. We also wish the children had made sketches at the apple farm. However, because the weather was cold, the children were not able to do so. We also should have had the children record and report back the answers to their questions instead of the teachers doing so.

It was a disappointment to the children and us that the apple seeds never sprouted.

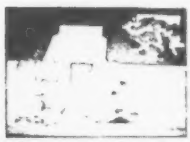
Phase 3

Phase 3 of a project often includes a culminating event. The children prepare to share the story of the project by reviewing all of the project work, selecting material to share, and reflecting on the new knowledge. A letter is also sent home to parents explaining Phase 3 and inviting them to the culminating event.

The teachers sent home a letter explaining Phase 3 of the project.

We talked with the children about how they wanted to share everything they had learned with their families. They decided that they wanted to have a party. We asked them what kinds of things we should have at the party, and they said "food!"

In preparation for Phase 3, parent volunteers came in to make a variety of apple recipes with the children. The children decided what food they were interested in making, and the parents lead the cooking groups. The food was then served at the culminating activity later that afternoon.

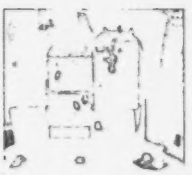


Parents lead cooking groups, and the food was served at the culminating activity later that afternoon.

We had such a great response to the food served at the culminating event that parents asked us for the recipes. In response, we made copies of the recipes and created an apple recipe book.

The teachers created a cookbook of food served at the culminating event.

We also discussed what activities the children wanted to share with their parents. The following pictures show some of the documentation and activities that the children presented to their parents.



Documentation reflected the children's activities during the project.

Reflections on Phase 3

We were impressed with the number of people who came to the culminating event. The event gave the parents the opportunity to view and appreciate the hard work of the children. The children loved sharing the information that they learned by being the tour guides for the visitors. The event also showed the children that their work was important and valued. It really boosted their self-esteem. We felt a sense of relief and accomplishment after the day was over.

Conclusion

We teachers felt that the project was a success. The children took responsibility for their own learning and truly lead the investigations. We had no idea at the beginning of the project that the children would be juicing vegetables. The children obtained a wealth of knowledge and developed positive dispositions towards learning.

We teachers gained a better understanding of the Project Approach by completing this project. We feel that it is a worthwhile and effective teaching method. We will definitely continue to use the Project Approach in our classrooms and look forward to embarking on a new project. The possibilities are endless!

Author Information

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Amy Thompson is a kindergarten teacher at Struthers Elementary School. She has a bachelor's degree in elementary education from Youngstown State University and is currently working on her master's degree in early childhood education at Youngstown State University. She recently joined a Reggio Emilia study group.

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Early Childhood Research & Practice

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Training and Education of Early Childhood Teachers: Selected Citations from the ERIC Database

ED455950 PS029712
Title: **Preparing the Workforce. NCEDL Spotlights Series, No. 33.**
Author Affiliation: National Center for Early Development & Learning, Chapel Hill, NC. (BBB35605)
Pages: 3
Publication Date: May 2001
Notes: Based on "Preparing the Workforce: Early Childhood Teacher Preparation at 2- and 4-Year Institutions of Higher Learning" by Diane Early and Pamela Winton.
Sponsoring Agency: Office of Educational Research and Improvement (ED), Washington, DC. (EDD00036)
Contract No: R307A60004
Available from: EDRS Price MF01/PC01 Plus Postage.
Availability: Frank Porter Graham Child Development Center, University of North Carolina-Chapel Hill, CB #8185, Chapel Hill, NC 27599-8185. Tel: 919-966-0867; Web site: http://www.ncedl.org.
Document Type: Reports--Research (143)
Geographic Source: U.S.; North Carolina

This report summarizes findings of a national survey of institutions of higher education (IHEs) with early childhood programs. The study, conducted by the National Council for Early Development and Learning, surveyed a nationally representative group of chairs/directors of early childhood teacher preparation programs of two- and four-year colleges and universities. The 438 IHEs participating in the survey were in 47 states plus Washington D.C., Puerto Rico, and the U.S. Virgin Islands. Major findings indicate that early childhood teacher education programs are in need of support. Overall, programs will not have adequate faculty to meet the projected workforce needs. The highest rated challenge of early childhood teacher education programs is difficulty attracting and retaining ethnically and linguistically diverse faculty. Early childhood teacher education programs have a smaller number of faculty serving a larger number of students than other programs in the same IHEs. Early childhood teacher education programs tend to have a greater percentage of part-time faculty members than do the institutions in which they reside. Gaps are evident in the programs with regard to their stated missions of preparing students to work with children with disabilities or with infants and toddlers, and the requirements of the program. Access to bachelor's degree programs upon completion of an associate's degree continues to be a problem because of articulation challenges. Other major challenges cited by IHEs include students' competing work or family-related responsibilities, and attracting and keeping students due to poor working conditions and wages in the field of early childhood. (KB)

Descriptors: *Articulation (Education); Associate Degrees; Bachelors Degrees; *College Faculty; Colleges; *Early Childhood Education; *Higher Education; *Teacher Education; *Teacher Education Programs

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ED454958 PS029579

Title: **Who's Caring for the Kids? The Status of the Early Childhood Workforce in Illinois.**
Author(s): Krajec, Valerie Dawkins; Bloom, Paula Jorde; Talan, Teri; Clark, Douglas
Author Affiliation: National-Louis Univ., Wheeling, IL. Center for Early Childhood Leadership.
(BBB35320)
Pages: 96
Publication Date: June 2001
Notes: A joint project by the Center for Early Childhood Leadership and the Illinois Network of Child Care Resource and Referral Agencies.
Sponsoring Agency: McCormick Tribune Foundation, Chicago, IL. (BBB28636)
Available from: EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
Document Type: Numerical/Quantitative Data (110); Reports--Evaluative (142)
Geographic Source: U.S.; Illinois

Noting that there is a lack of consistent and accurate information about the teachers, administrators, and support staff who work in early childhood settings in Illinois, this study documented the early childhood workforce serving in infant/toddler, preschool, and school-age programs in the state. The study also determined the impact of the current career development system on practitioners, the programs they serve, and the public at large. Data sources included state agencies' statistics, other state and national reports, and surveys on compensation and turnover, preferred nomenclature for professional roles and program types, and pre-kindergarten teachers' career decisions. Survey participants included 4,125 early childhood teachers and administrators and 557 pre-kindergarten teachers. Among the major findings of the study are the following: (1) there are wide disparities in qualifications and compensation for comparable work in different early childhood settings; (2) director qualifications are related to program quality; (3) accreditation has a positive impact on overall program quality; (4) Illinois lacks a coherent system of initial preparation, ongoing professional development, and career counseling for early childhood teaching, administrative, and support staff; and (5) many caregivers operate outside the established early childhood regulatory system and thus do not have access to technical assistance or professional training. Based on findings, specific recommendations were devised for designing and implementing a comprehensive statewide career development system. (Appendices contain a glossary of relevant terms and data collection instruments. Contains 80 endnotes.) (KB)

Descriptors: Administrator Qualifications; *Administrators; Career Development; *Career Ladders; *Child Caregivers; *Day Care; Day Care Centers; *Early Childhood Education; Educational Quality; Family Day Care; Preschool Teachers; Teacher Qualifications
Identifiers: Day Care Quality; *Illinois; Project Head Start

ED451943 PS029406
Title: **How Do We Prepare Future Early Childhood Teachers for Developmentally and Culturally Appropriate Practice (DCAP) among Seven Different States in U.S.?**
Author(s): Hyun, Eunsook
Pages: 44
Publication Date: April 2001
Notes: Paper presented at the Annual Meeting of the American Educational Research Association (Seattle, WA, April 10-14, 2001). Written with Rosario Morales, Georgianna Durate, Saundra DiPento, Jocelynn Smrekar, Celeste Matthews, and Jill Ardley.
Available from: EDRS Price MF01/PC02 Plus Postage.
Document Type: Reports--Research (143); Speeches/meeting papers (150)
Geographic Source: U.S.; Florida

In 1995, a nationwide collaborative research-net was formed to articulate practically an early childhood education (ECE) teacher preparation curriculum framework based on developmentally and culturally appropriate practices (DCAP). This paper presents and discusses findings of the 5-year study involving teacher educators from California, Florida, Georgia, Minnesota, Pennsylvania, Oklahoma, and Texas. Based on the theoretical frameworks of social phenomenology and hermeneutics, shared key ideological constructs were drawn from several sources, including developmentally appropriate practice, anti-bias education, critical pedagogy, and multiple/multiethnic perspective taking. Seven ECE faculty from seven

states actively participated in the research-net activity. Each had infused the DCAP teacher education curriculum components into field-based courses and were electronically connected to prospective teachers to share experiences. Data were composed of interview transcripts, field notes, instructional materials, e-mail messages, Internet WebBoard discussion, and presentation papers. Qualitative data analysis techniques were used. Findings indicated that each site had a unique DCAP-based approach in responding to the nature of the community they serve. The paper outlines the themes emerging from analysis: (1) autobiographical approach and reflective activity as keys to teacher preparation; (2) field integration and transforming oneself as a life-long learner; (3) social pro-activism; (4) new self image as co-learner; (5) effectiveness of DCAP-based teacher education curriculum; (6) emerging self- critical questions; and (7) obstacles and dilemma to implementing DCAP-based teacher preparation. The paper's four appendices describe how four universities prepare their early childhood teachers to work with young children and families from various ethnic/racial/cultural backgrounds. (Contains 57 references plus additional references in appendices.) (KB)

Descriptors: *Culturally Relevant Education; *Developmentally Appropriate Practices; Early Childhood Education; Higher Education; Models; *Preschool Teachers; *Teacher Education; Teacher Education Programs; Teacher Educators

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ED453969 PS029558
Title: **Head Start FACES: Longitudinal Findings on Program Performance. Third Progress Report.**
Author(s): Zill, Nicholas; Resnick, Gary; Kim, Kwang; McKey, Ruth Hubbell; Clark, Cheryl; Pai-Shefali; Connell, David; Vaden-Kiernan, Michael; O'Brien, Robert; D'Elio, Mary Ann
Author Affiliation: Ellsworth Associates, Mclean, VA. (BBB35778); Abt Associates, Inc., Washington, DC. (BBB20929); CDM Group, Inc. (BBB32571); Westat Research, Inc., Rockville, MD. (LYR95205)
Pages: 192
Publication Date: January 2001
Sponsoring Agency: Administration on Children, Youth, and Families (DHHS), Washington, DC. Child Care Bureau. (BBB33982)
Contract No: HHS-105-96-1930HHS-105-96-1912
Available from: EDRS Price MF01/PC08 Plus Postage.
Document Type: Reports--Evaluative (142)
Geographic Source: U.S.; Virginia

The Head Start Family and Child Experiences Survey (FACES) is an ongoing, national, longitudinal study of the cognitive, social, emotional, and physical development of Head Start children; the characteristics, well-being, and accomplishments of families; the observed quality of Head Start classrooms; and the characteristics and opinions of Head Start teachers and other staff. The FACES study involves a nationally stratified random sample of 3,200 children and families in 40 Head Start programs, who were studied at program entry in Fall 1997, assessed at the completion of 1 or 2 years in Head Start, and followed up in kindergarten and first grade. This report is the third to detail findings of the study in progress. Findings are presented in four areas related to program performance objectives: (1) enhancement of children's development and school readiness; (2) strengthening of families as their children's primary nurturers; (3) provision of high quality educational, health, and nutritional services; and (4) relation of classroom quality to child outcomes. Findings indicate that children completing Head Start showed significant gains in vocabulary and writing skills relative to national norms established for children of all income levels. Although children who initially scored in the bottom quartile in vocabulary, writing, and math skills had higher gains than other children, they still scored substantially below national norms at the end of Head Start. Parents cited Head Start as an important source of support in rearing their children. Quality in classrooms continues to be good across three points of measurement. Most teachers had good teaching qualifications. Quality of classrooms has been linked with child outcomes. Appended is information on data collection instruments, including child assessment, parent interviews, classroom observation, and staff questionnaires, and instruments used in the validation sub-study. (Contains 45 references.) (Author/KB)

Descriptors: Child Development; Cognitive Development; *Early Intervention; Educational Practices; Emotional Development; Family (Sociological Unit); Longitudinal Studies; *Outcomes of Education;

Physical Development; *Preschool Children; *Preschool Education; Preschool Teachers; *Program Effectiveness; Program Evaluation; Social Development; Teacher Attitudes; Well Being
Identifiers: Head Start Family and Child Experiences Survey; Head Start Program Performance *Project Head Start

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EJ631414 PS531806
Title: **Child Care Provider Perspectives on the Role of Education and Training for Quality Caregiving.**
Author(s): Gable, Sara; Hansen, Joanna
Source: *Early Child Development and Care*, v166 p39-52 Feb 2001
Publication Date: 2001
ISSN: 0300-4430
Document Type: Journal articles (080); Reports--Research (143)

Used focus group discussions to determine child care providers' opinions about the content of training necessary for providing quality care and providers' beliefs about the level of training and education required for child care workers. Examined findings in terms of providers' perceptions of professional worth and the design of educational and professional development initiatives. (TJQ)

Descriptors: Caregiver Attitudes; *Caregiver Training; *Child Caregivers; Day Care; Early Childhood Education; Experience; *Preschool Teachers; Prior Learning; Professional Development; Program Effectiveness; Teacher Attitudes; *Teacher Education; Teacher Effectiveness; *Teacher Qualifications
Identifiers: *Caregiver Qualifications

EJ631412 PS531804
Title: **Quality Evaluation and Quality Enhancement in Preschool: A Model of Competence Development.**
Author(s): Sheridan, Sonja
Source: *Early Child Development and Care*, v166 p7-27 Feb 2001
Publication Date: 2001
ISSN: 0300-4430
Document Type: Journal articles (080); Reports--Research (143)

Examined whether preschool quality could be enhanced through competence development in teaching staff simultaneous to organizational changes and financial cutbacks. Tested a model for competence development with an intervention group that took part in a competence development program. Found that the development work led to a higher quality in eight of nine preschools. (TJQ)

Descriptors: Change Strategies; Financial Support; Models; Organizational Change; Preschool Education; *Preschool Teachers; Professional Development; Program Evaluation; *Program Improvement; *Teacher Competencies; *Teacher Effectiveness; *Teacher Improvement; Teacher Qualifications
Identifiers: Early Childhood Environment Rating Scale; Reflection Process; Reflective Awareness; *Reflective Practice

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ED455953 PS029718
Title: **Characteristics of Early Childhood Teachers and Structural Elements of Early Care and Education in the United States.**
Author(s): Saluja, Gitanjali; Early, Diane M.; Clifford, Richard M.
Pages: 28
Publication Date: 2001
Sponsoring Agency: Office of Educational Research and Improvement (ED), Washington, DC. (EDD00036)

Contract No: R307A60004
Available from: EDRS Price MF01/PC02 Plus Postage.
Document Type: Reports--Research (143)
Geographic Source: U.S.; North Carolina

This study assessed demographic information on early childhood programs and teachers of 3- and 4-year-olds. Questionnaires were sent to a random sample of early childhood programs across the United States. Data were collected on teacher characteristics and structural features (enrollment, class size, hours of operation, and ratio of teachers to students) of early childhood programs. Participating were 1,902 teachers. Responses indicated that the vast majority of these teachers were women and that 78 percent of the teachers were white. Approximately 50 percent had earned a college degree, although educational attainment varied among program types. For-profit centers outnumbered other types of centers (29 percent of centers), although the number of early childhood programs in public schools was increasing rapidly (16 percent). Twenty-two percent of centers were affiliated with a religious organization, 25 percent were independent non-profit or other public agency, and 8 percent were Head Start programs. The majority of centers were open for the full day. Racial/ethnic composition in the average classroom was 66 percent white, 15 percent African American, 9 percent Hispanic, 5 percent mixed race, 4 percent Asian American, 1 percent Native American, and 1 percent other. About 60 percent of classrooms had a predominant racial/ethnic group, with Head Start programs most likely to be predominantly African American and church/synagogue-based programs especially likely to be predominantly white. The average classroom had 16.4 children and 2.0 paid staff. (Contains 19 references.) (KB)

Descriptors: *Child Caregivers; Class Size; Comparative Analysis; *Day Care; Demography; Early Childhood Education; Educational Attainment; Enrollment; *Preschool Teachers; Questionnaires; *Teacher Characteristics; Teacher Qualifications; Teacher Student Ratio
Identifiers: Caregiver Child Ratio; Caregiver Qualifications; *Program Characteristics

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ED447935 PS029039
Title: **Effects of Child and Teacher Characteristics on Children's Observed Engagement.**
Author(s): Ridley, Stephanie Maher; de Kruif, Renee E. L.; McWilliam, R. A.
Pages: 14
Publication Date: August 2000
Notes: Paper presented at the Annual Convention of the American Psychological Association (108th, Washington, DC, August 2000).
Sponsoring Agency: Office of Educational Research and Improvement (ED), Washington, DC. (EDD00036)
Contract No: R307F70099
Available from: EDRS Price MF01/PC01 Plus Postage.
Document Type: Numerical/Quantitative Data (110); Reports--Research (143); Speeches/meeting papers (150)
Geographic Source: U.S.; North Carolina

Noting that there is little information available about how child and teacher characteristics are related to child engagement behaviors, this study examined the effects of child characteristics on observed engagement in early childhood settings, and the interaction effects of child characteristics and teacher interaction behaviors on observed engagement. Participating in the study were 71 children and 40 lead teachers selected from 40 classrooms at 17 child care centers. Approximately half were female; half were racial or ethnic minorities. All the teachers were female. Of interest for this study were parent ratings of child engagement in two areas (competence and persistence) and personality and competence in three areas (attention, behavior modulation, and verbal/emotional expressiveness). Teachers were rated for their quality of redirective, elaborative, and nonelaborative interactive behaviors and the quality of their affect. Children's engagement level (sophisticated, differentiated, focused attention, unsophisticated, nonengagement) was based on observations during 15-minute observation sessions. The findings of the study suggest that nonelaboratives such as praising or introducing should not be used excessively with attentive and active children. Some engagement levels (sophisticated, differentiated, nonengagement) are susceptible to treatment-by-aptitude effects, others are not (differentiated, unsophisticated). Some teacher

interaction behaviors are equally effective (affect) or ineffective (redirectives) regardless of child characteristics. Active and emotionally expressive children are likely to spend time in sophisticated engagement, regardless of teacher interaction. (Contains 12 references.) (KB)

Descriptors: Attention; Child Behavior; Competence; Persistence; Personality; *Preschool Children; Preschool Education; *Preschool Teachers; *Student Characteristics; *Teacher Characteristics; *Teacher Student Relationship
Identifiers: *Student Engagement

ED444713 PS028792
Title: **The 1999 National Survey of Child Development Associates (CDAs).**
Author(s): Bredekamp, Sue; Bailey, Caryn T.; Sadler, Allen
Author Affiliation: Council for Professional Recognition, Washington, DC. (BBB36045)
Pages: 9
Publication Date: June 29, 2000
Notes: Paper presented at the Head Start National Research Conference (5th, Washington, DC, June 28-July 1, 2000).
Available from: EDRS Price MF01/PC01 Plus Postage.
Document Type: Reports--Research (143); Speeches/meeting papers (150)
Geographic Source: U.S.; District of Columbia

The Child Development Associate (CDA) National Credentialing Program is a national system to improve the professional competence of early childhood teaching staff. This report presents the findings of the 1999 national survey to assess the impact of credentialing on individuals' careers and professional development. A sample of 4,993 CDAs was randomly selected from those credentialed in five selected years (1998, 1997, 1996, 1993, 1989), yielding three groups for comparison: (1) recently credentialed; (2) mid-level; and (3) veteran. The response rate was approximately 20 percent. The major findings indicate that half the respondents received the CDA between 26 and 40 years of age. Respondents were more diverse with regard to race/ethnicity than the U.S. population as a whole. Thirty percent had been Head Start parents. Over 40 percent had some college education at time of credentialing, with all groups tending to attain degrees after credentialing. There was an increase in the percentage who were teachers or held supervisory positions between the time of credentialing and the survey. Increases in salary over time were reported by all groups. Most respondents reported receiving training through coursework, pre- or inservice training, and continuing education units. Over 60 percent reported not having to pay for any portion of their CDA training, with the percentage receiving financial support decreasing over the past 10 years. Changes directly linked to credentialing were most often increased salary or promotions. Seventy-seven percent of veterans were still in early childhood education, compared to 81 percent of mid-level group, and 90 percent of new CDAs. (KB)

Descriptors: *Child Caregivers; Comparative Analysis; *Credentials; *Early Childhood Education; National Surveys; *Preschool Teachers; Professional Development; Staff Development; Teacher Qualifications
Identifiers: *CDA; *Child Development Associate; Project Head Start

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ED447920 PS029014
Title: **Center Caregivers and Family Child Care Providers Are Different: Training Profiles and Preferences.**
Author(s): Dunn, Loraine; Tabor, Susan
Pages: 8
Publication Date: April 2000
Notes: Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 24-28, 2000).
Available from: EDRS Price MF01/PC01 Plus Postage.
Document Type: Reports--Research (143); Speeches/meeting papers (150)

Geographic Source: U.S.; Oklahoma

This study sought to determine if family child care providers and center caregivers: (1) seek training for different reasons; (2) hold varying opinions regarding the best source of training according to content area; (3) demonstrate differences in training content obtained; and (4) use different training sources for a variety of training topics. Data were gathered from a mailed survey of licensed family child care and day care center providers in a Midwestern state. Findings indicated differences between family providers and center caregivers. Family providers value and depend more upon resource and referral agencies than do center caregivers; conferences, inservice training, and college courses were consistently preferred by center caregivers. Also center caregivers were more likely to have received training in a variety of content areas than were family providers. (Includes 4 data tables. Contains 12 references.) (EV)

Descriptors: *Caregiver Attitudes; *Child Caregivers; Comparative Analysis; Day Care; *Day Care Centers; Early Childhood Education; *Family Day Care; Motivation; Professional Development; *Training
Identifiers: Caregiver Qualifications; *Caregiver Training

ED450881 PS029214
Title: **Relationship between Teachers' Use of Reflection and Other Selected Variables and Preschool Teachers' Engagement in Developmentally Appropriate Practice.**
Author(s): Hao, Yi
Pages: 17
Publication Date: 2000
Available from: EDRS Price MF01/PC01 Plus Postage.
Document Type: Reports--Research (143)
Geographic Source: U.S.; Illinois

Helping teachers move toward more developmentally appropriate practice in classrooms for young children is a major goal of the early childhood educational profession. However, little is known about factors likely to result in more developmentally appropriate practice (DAP). This study examined the relationship between preschool teachers' engagement in developmentally appropriate practice and teachers' education/academic background, content of their early childhood teacher training, supervised practical experiences, years of employment in child care/education, and perceptions of reflective practices and the most predictive combination of the above variables in meeting NAEYC standards. The sample consisted of 64 teachers of 3-, 4-, and 5-year-olds from 20 licensed child care centers in western New York. The data included teacher scores on the Teacher Information Report and Reflective Teaching Instrument and the scores of teachers' classroom practices as measured by the NAEYC Classroom Observation Scale. Correlation of all identified variables listed above with the dependent variable of DAP were tested using the Pearson-Product moment correlation coefficient. Forward multiple regression procedures were used to determine which of the variables and which combination of those identified predictors contributed most extensively to DAP scores. Findings indicated that teachers' use of reflection, amount of supervised experiences, and content of early childhood teacher training were significantly related to DAP ratings. Among the three predictor variables, teachers' use of reflective teaching was the strongest predictor of DAP. The combination of teachers' use of reflection with the amount of supervised experience maximized the prediction of greater DAP. (Contains 28 references.) (Author/KB)

Descriptors: Child Caregivers; *Developmentally Appropriate Practices; Predictor Variables; *Preschool Education; *Preschool Teachers; *Reflective Teaching; Teacher Qualifications

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EJ611831 PS530783
Title: **Teachers' Beliefs: The "Whys" behind the "How Tos" in Child Care Classrooms.**
Author(s): Cassidy, Deborah J.; Lawrence, Jennifer M.
Source: Journal of Research in Childhood Education, v14 n2 p193-204 Spr-Sum 2000
Publication Date: 2000

ISSN: 0256-8543
Document Type: Journal articles (080); Reports--Research (143)

Examined 12 child caregivers' ability to articulate their beliefs concerning teacher practice, and personal and professional influences related to those beliefs. Found that 33 percent of teachers' rationales focused on children's socio-emotional development, 10 percent on cognitive development, and 6 percent on language development. Teachers with 4-year degrees provided twice as many cognitively-focused rationales as teachers with less education. (Author/KB)

Descriptors: *Beliefs; *Caregiver Attitudes; Caregiver Child Relationship; *Child Caregivers; Comparative Analysis; *Day Care; Early Childhood Education; *Influences; Interviews; Preschool Teachers; Teacher Attitudes; Teacher Qualifications; Teacher Student Relationship

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EJ610271 PS530716
Title: **The "Degree" of Instructor Education and Child Outcomes in Junior Kindergarten: A Comparison of Certificated Teachers and Early Childhood Educators.**
Author(s): Coplan, Robert J.; Wichmann, Cherami; Lagace-Seguin, Daniel G.; Rachlis, Lorne M.; McVey, Marianna K.
Source: *Journal of Research in Childhood Education,* v14 n1 p78-90 Fall-Win 1999
Publication Date: 1999
ISSN: 0256-8543
Document Type: Journal articles (080); Reports--Research (143)

Explored differences in the social and cognitive development of 4-year-olds in junior kindergarten taught by differentially educated instructors. Found that children taught by early childhood educators with 2-year college degrees in early childhood education and those taught by teachers with a university teaching certificate did not differ in social and cognitive skills. Findings pose conceptual and policy implications. (Author/KB)

Descriptors: *Cognitive Development; Comparative Analysis; Computation; *Interpersonal Competence; *Preschool Children; Preschool Education; *Preschool Teachers; Teacher Background; *Teacher Certification; *Teacher Qualifications; Vocabulary Skills

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EJ610260 PS530570
Title: **Characteristics of Teachers Who Talk the DAP Talk and Walk the DAP Walk.**
Author(s): McMullen, Mary Benson
Source: *Journal of Research in Childhood Education,* v13 n2 p216-230 Spr-Sum 1999
Publication Date: 1999
ISSN: 0256-8543
Document Type: Journal articles (080); Reports--Research (143)

Investigated the characteristics of early childhood education teachers who both state a belief in developmentally appropriate practices and engage in these practices in their classrooms. Found that beliefs were strongly correlated with practice, and were related to high personal teaching efficacy and internal locus of control, academic background, and experience in preschool education. (JPB)

Descriptors: *Developmentally Appropriate Practices; Early Childhood Education; *Preschool Teachers; *Primary Education; Teacher Attitudes; *Teacher Characteristics; Teacher Education

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EJ610250 PS530560
Title: **Pathways to Quality in Head Start, Public School, and Private Nonprofit Early Childhood**

Programs.
Author(s): Epstein, Ann S.
Source: *Journal of Research in Childhood Education*, v13 n2 p101-19 Spr-Sum 1999
Publication Date: 1999
ISSN: 0256-8543
Document Type: Journal articles (080); Reports--Research (143)

Examined differences in teacher qualifications, inservice training, program quality, and children's development in Head Start, public school, and private nonprofit early childhood classrooms. More formal education for public school teachers was offset by better inservice training for Head Start teachers, as programs achieved equal levels of quality. (JPB)

Descriptors: *Child Development Centers; Early Childhood Education; Educational Quality; *Inservice Teacher Education; *Preschool Teachers; *Program Effectiveness; Public School Teachers; *Teacher Education
Identifiers: Project Head Start

ED441605 PS028621
Title: **Early Childhood Teacher Education Licensure Patterns and Curriculum Guidelines: A State by State Analysis.**
Author(s): McCarthy, Jan; Cruz, Josue; Ratcliff, Nancy
Author Affiliation: Council for Professional Recognition, Washington, DC. (BBB36045)
Pages: 68
Publication Date: 1999
Notes: Some color figures may not reproduce adequately.
Available from: EDRS Price MF01/PC03 Plus Postage.
Availability: Council for Professional Recognition, 2460 16th Street, NW, Washington, DC 20009-3575. Tel: 800-424-4310 (Toll Free); Tel: 202-265-9090; Fax: 202-265-9161; Web site: http://www.cdacouncil.org.
Document Type: Numerical/Quantitative Data (110); Reports--Evaluative (142)
Geographic Source: U.S.; District of Columbia

One of the strongest predictors of quality programming for young children is teacher preparation. This report presents two studies: the first examining state early childhood teacher education requirements; and the second examining state curriculum guidelines for early childhood education. Section 1 of the report details the method and findings of Study 1, for which data were collected from 50 states and the District of Columbia regarding their early childhood teacher education licensure. Twelve licensure patterns are identified, based on the age ranges of the children that a teacher candidate is prepared to teach. States' regulatory specifications are examined by content area, outcomes, competencies, performance standards, and program standards. Issues and policy implications are also discussed. Section 1 concludes by that although a few states have a well-defined knowledge base, performance expectations, and performance assessment for early childhood teachers, one-fifth of states do not have early childhood teacher education requirements that extend to children younger than 5 years. Seven appendices include descriptions of initiatives of the National Council for Accreditation of Teacher Education. Section 2 of the report gives an overview of state guidelines for the development and delivery of early childhood curricula. Presented in question-answer format, section 2 provides state-by-state information on how guidelines are written and organized, age/grade level requirements, application of guidelines to children in special education and gifted programs, inclusion of various subject areas, theoretical orientation for guideline development, links to developmentally appropriate practice, references to integrated curriculum, and inclusion of assessment information. Issues and policy implications are discussed. Two appendices include state guideline titles. (KB)

Descriptors: Elementary Education; Knowledge Base for Teaching; *Preschool Curriculum; Preschool Education; *Preschool Teachers; *State Regulation; State Standards; *Teacher Certification; *Teacher Education; *Teacher Education Curriculum; Teacher Qualifications
Identifiers: National Council for Accreditation of Teacher Educ

EJ593642 PS529549
Title: **Concepts of Science in the Early Years: Teachers' Perceptions towards a "Transformational Field."**
Author(s): Tsitouridou, Melpomeni.
Source: European Early Childhood Education Research Journal, v7 n1 p83-93 1999
Publication Date: 1999
ISSN: 1350-293X
Document Type: Journal articles (080); Reports--Research (143)
Journal Announcement: CIJAPR2000

Explored teachers' and student teachers' views of the framework of educational training in the area of science in early-childhood education. Found that scientific training was necessary to support the preschool curriculum; teachers have different tendencies in regard to scientific knowledge; and the cohesion between content knowledge and pedagogical processes is flexible and encourages flexibility in teacher perceptions. (LBT)

Descriptors: Early Childhood Education; Higher Education; Knowledge Base for Teaching; Preschool Curriculum; Preschool Teachers; *Science Education; *Student Attitudes; Student Teachers; *Teacher Attitudes; *Teacher Education
Identifiers: Science Skills

ED423987 PS026938
Title: **Teacher Beliefs and Classroom Structure as Influences on Head Start Classroom Quality.**
Author(s): Abbott-Shim, Martha; Lambert, Richard; McCarty, Frances
Pages: 11
Publication Date: July 1998
Notes: Paper presented at the National Head Start Research Conference (4th, Washington, DC, July 19-12, 1998).
Sponsoring Agency: Administration for Children, Youth, and Families (DHHS), Washington, DC. (BBB19384)
Contract No: 90YD0016/02
Available from: EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
Document Type: Reports--Research (143); Speeches/meeting papers (150)
Geographic Source: U.S.; Georgia

This study investigated the characteristics and beliefs of Head Start teachers and teacher aides and the classroom structural dimensions that are associated with Head Start classroom quality. The quality of classroom teaching practices was assessed using the Assessment Profile for Early Childhood Programs: Research Version. Teachers completed the Teacher Beliefs Scale and Instructional Activities Scale. The results provide strong support for previous research demonstrating that teacher's education and the classroom structure (including child to adult ratio and class size) are related to classroom quality for Head Start. The lack of relationship in the expected direction between teacher beliefs and educational level or years experience suggests that other factors have more influence over the beliefs of Head Start staff with regard to developmentally appropriate practices. Findings suggest that staff development training, management climate, local traditions of quality, and the informal influences that staff have on each other may be stronger determinants of teacher beliefs than formal education and experience. (JPB)

Descriptors: At Risk Persons; Classroom Environment; Educational Assessment; *Educational Quality; Preschool Education; *Preschool Teachers; Teacher Aides; *Teacher Attitudes; Teacher Background; *Teacher Characteristics; Teacher Education; *Teacher Effectiveness; Teacher Evaluation
Identifiers: *Project Head Start

ED421211 PS026624
Title: **Which Counts More for Excellence in Childcare Staff: Years in Service, Education Level or ECE Coursework?**
Author(s): Honig, Alice Sterling; Hirallal, Andrea
Pages: 39
Publication Date: June 1998
Notes: Paper presented at the Annual Quality Infant/Toddler Caregiving Workshop (22nd, Syracuse, NY, June 15-19, 1998).
Available from: EDRS Price MF01/PC02 Plus Postage.
Document Type: Reports--Research (143); Speeches/meeting papers (150)
Geographic Source: U.S.; New York

A sample of 81 caregivers in 24 urban centers was observed in interactions with preschool children ages 3 to 5. Observation centered on the domains of positive and negative socioemotional inputs, language facilitation, concept promotion, and caregiving and cleaning up (of children and of environment). The teachers provided responses to questions about their number of years of formal schooling, years in child care, years at the same center, own parenting status, and how many ECE/CD (early childhood education and child development) courses and workshops they had ever taken. Hierarchical stepwise regressions and ANOVAs showed the importance of ECE/CD training. When all positive teacher interactions tallied in the classroom were combined, ECE/CD training accounted for over 62 percent of the variance in teacher inputs. Results suggested that when interviewing candidates for child care positions, directors need to verify a candidate's prior ECE/CD training, along with providing supports for staff to obtain ongoing ECE/CD coursework to ensure high quality child care. (Contains 32 references.) (Author/EV)

Descriptors: *Caregiver Child Relationship; *Child Caregivers; Day Care; Day Care Centers; Early Childhood Education; Interaction; *Teacher Background; Teacher Characteristics; Teacher Student Relationship; *Teaching Experience; *Training
Identifiers: *Caregiver Qualifications; Caregiver Training; *Day Care Quality

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ED417819 PS026379
Title: **Early Childhood Caregivers' Perceptions of Child Care Availability and Quality: The Influence of Education, Training, and Experience.**
Author(s): Buhrman, Audrey K.; Sell, Marie A.
Pages: 8
Publication Date: October 1997
Notes: Paper presented at the Annual Fall Convention of the Tennessee Association of School Psychologists (Chattanooga, TN, October, 1997).
Available from: EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
Document Type: Reports--Research (143); Speeches/meeting papers (150)
Geographic Source: U.S.; Tennessee

This study examined early childhood caregivers' perceptions of the availability and quality of child care and examined the extent to which caregiver knowledge, training, experience, and motivation predicted judgments of quality and availability. Surveys were mailed to 292 licensed and registered family day care providers in Shelby County, Tennessee (with a 10 percent return rate) and 290 caregivers at 19 licensed day care centers randomly selected from all centers in Shelby County (with a 19 percent return). Results indicated that caregivers with more experiences related to child care and more child care training rated the quality of child care higher than those with less experience. Caregivers with more training perceived child care to be more available. Knowledge and motivation variables did not predict perceptions of quality or availability. Knowledge was positively correlated with training. Caregivers in home care settings were less motivated than those in day care settings to read relevant materials on their own and were less interested in receiving continuing education. (KB)

Descriptors: *Child Caregivers; *Day Care; Early Childhood Education; *Family Day Care; Motivation; Predictor Variables; Professional Development
Identifiers: Availability (Programs and Services); *Caregiver Attitudes; Caregiver Qualifications;

Caregiver Training; Day Care Quality; Tennessee

ED406015 PS025233
Title: **Children's Day Care Experiences: Differences by Age, Gender, and Type of Program.**
Author(s): Clawson, Mellisa A.
Pages: 20
Publication Date: April 1997
Notes: Paper presented at the Biennial Meeting of the Society for Research in Child Development (62nd, Washington, DC, April 3-6, 1997). For a related paper, see PS 025 232.
Available from: EDRS Price MF01/PC01 Plus Postage.
Document Type: Reports--Research (143); Speeches/meeting papers (150)
Geographic Source: U.S.; New York

This study examined how children's experience of regulatable quality and teacher-child interaction differs between nonprofit and for-profit day care settings. Gender and age differences in children's day care experiences were also explored. Assessments of regulatable quality and teacher-child interaction were conducted in three for-profit and two nonprofit centers serving, respectively, 122 and 72 children age 36 to 71 months. Data collection included classroom observations and teacher interviews. Regulatable quality variables included teacher-child ratio, class size, and teacher qualifications. Teacher-child interaction was assessed with respect to rate, content, and affective tone. Results indicated that: (1) older children experienced day care environments of higher quality in terms of both regulatable features and teacher-child interaction; (2) boys' environments were less optimal than girls' with respect to teacher-child interaction; and (3) nonprofit centers had higher levels of regulatable quality and positive, meaningful teacher-child interactions compared to for-profit centers. (Contains 24 references.) (Author/KDFB)

Descriptors: *Age Differences; Caregiver Child Relationship; Child Caregivers; Class Size; Comparative Analysis; Day Care; *Day Care Centers; Interviews; *Nonprofit Organizations; Observation; *Preschool Children; Preschool Education; *Sex Differences; Teacher Qualifications; Teacher Student Ratio; Teacher Student Relationship
Identifiers: *Day Care Quality

ED406014 PS025232
Title: **Contributions of Regulatable Quality and Teacher-Child Interaction to Children's Attachment Security with Day Care Teachers.**
Author(s): Clawson, Mellisa A.
Pages: 18
Publication Date: April 1997
Notes: Paper presented at the Biennial Meeting of the Society for Research in Child Development (62nd, Washington, DC, April 3-6, 1997). For a related paper, see PS 025 233.
Available from: EDRS Price MF01/PC01 Plus Postage.
Document Type: Reports--Research (143); Speeches/meeting papers (150)
Geographic Source: U.S.; New York

This study examined regulatable quality and teacher-child interaction and, their influences on the quality of the attachment relationship developed by preschool children with their day care teachers. Observation and interview procedures were completed in 12 classrooms serving 194 preschoolers. Regulatable quality variables included teacher-child ratio, class size, and teacher qualifications. Teacher-child interaction was assessed with respect to rate, content (traditional, socially-oriented, or control/disciplinary style), and affective tone. Results indicated that class size and teacher-child ratio were especially variable, because classes were often combined for joint activities or were divided into small groups. Negative teacher affect occurred infrequently, but flat emotional tone was not uncommon. Controlling for child age, it was found that class size was negatively related to teacher-child ratio and teacher qualifications, and teacher-child ratio was positively related to teacher qualifications. The rate of teacher-child interaction was positively related to traditional and socially-oriented interactions. Control interactions were related to negative and

neutral teacher affect, and negatively related to positive teacher affect. Class size was negatively related to interaction rate and traditional- and socially-oriented interactions. Teacher-child ratio was related to interaction rate and traditional interaction. Children's attachment security scores were negatively associated with neutral teacher affect and control interaction. The composite variables of quality and teacher-child interaction, formed from the results of a principle components analysis, were used in multiple regression analyses. Tentative support was found for paths between: (1) low quality teacher-child interaction and children's insecurity in the teacher-child relationship; and (2) regulatable quality and high quality teacher-child interaction. (Contains 21 references.) (KDFB)

Descriptors: *Attachment Behavior; Caregiver Child Relationship; Child Caregivers; Class Size; Day Care; *Day Care Centers; Factor Analysis; Interviews; Observation; *Preschool Children; Preschool Education; Regression (Statistics); Teacher Qualifications; Teacher Student Ratio; *Teacher Student Relationship
Identifiers: *Day Care Quality; *Security of Attachment

EJ561596 PS527523
Title: **The Prediction of Process Quality from Structural Features of Child Care.**
Author(s): Phillipsen, Leslie C.; Burchinal, Margaret R.; Howes, Carollee; Cryer, Debby
Source: *Early Childhood Research Quarterly*, v12 n3 p281-303 1997
Publication Date: 1997
ISSN: 0885-2006
Document Type: Journal articles (080); Reports--Research (143)

This study examined the structure of child care classrooms and centers to predict process quality. Costs and quality of early childhood center-based care in four states with varying levels of regulation were analyzed to identify characteristics of the teacher, classroom, director, and center related to child care quality. Findings suggest the need for stricter regulations and modified budgets. (TJQ)

Descriptors: Budgeting; *Day Care Centers; Early Childhood Education; *Educational Quality; Program Evaluation; *State Regulation; Teacher Influence; *Teacher Qualifications; Teacher Salaries; Teaching Experience
Identifiers: *Day Care Quality; Program Characteristics

EJ557298 JC507942
Title: **The Professional Experiences and Continued Education of Associate Degree Early Childhood Graduates in Ohio.**
Author(s): Schulte, ReJean
Source: *Michigan Community College Journal: Research & Practice*, v3 n2 p69-78 Fall 1997
Publication Date: 1997
ISSN: 1081-9428
Document Type: Journal articles (080); Reports--Research (143)

Discusses methodology and results of a study of Ohio graduates who earned associate degrees in early childhood education between 1987-1995. The study examines their professional experiences, continued education, and status compared with the National Association for Education of Young Children professional development model. (14 citations) (YKH)

Descriptors: Alumni; Associate Degrees; Community Colleges; Comparative Analysis; Continuing Education; *Early Childhood Education; Employment Level; Graduate Surveys; Job Satisfaction; *Outcomes of Education; Professional Development; Research Methodology; *Teacher Attitudes; *Teacher Education; *Teaching (Occupation); Two Year Colleges; Vocational Followup
Identifiers: National Association Educ of Young Children

EJ552779 PS527112
Title: **Conditions of Caregiving, Provider Nurturance and Quality Care.**
Author(s): Austin, Ann M. Berghout; Lindauer, Shelley L. Knudsen; Rodriguez, Ariel; Norton, Maria L.; Nelson, Farol A. Groutage
Source: *Early Child Development and Care*, v135 p21-33 Aug 1997
Publication Date: 1997
Notes: Special Issue on: "Contexts in Child Care."
ISSN: 0300-4430
Document Type: Journal articles (080); Reports--Research (143)

Examined relationships of child care provider education, presence of children from economically strained homes, and program structure to providers' self-perception, nurturance, and caregiving conditions in 36 licensed family day care homes. Found that when provider self-perceptions were high, but day care clients experienced economic strain, the program structure involved fewer enrichment activities. (Author/KB)

Descriptors: At Risk Persons; *Caregiver Child Relationship; Child Caregivers; *Day Care; Economic Status; Family Characteristics; Family Day Care; *Infants; Socioeconomic Status; *Toddlers
Identifiers: *Caregiver Attitudes; Caregiver Behavior; Caregiver Qualifications; *
Day Care Quality; Professional Identity

EJ552761 PS527094
Title: **The Selection and Preparation of Early Childhood Teachers: Perceptions of Employers and Teachers.**
Author(s): Rodd, Jillian
Source: *Early Child Development and Care*, v130 p99-110 Mar 1997
Publication Date: 1997
ISSN: 0300-4430
Document Type: Journal articles (080); Reports--Research (143)
Journal Announcement: CIJMAR1998

Studied perceptions of early childhood teachers and employers regarding early childhood teacher education. Found that previous experience with, attitudes toward, and understanding of children and entry qualifications were weighted higher than age and gender for teacher selection. Lectures, group discussion, direct experience with children, and planning and implementing curricula were regarded as most effective teaching methods and experiences. (Author/KB)

Descriptors: Administrator Attitudes; *Early Childhood Education; Employer Attitudes; Higher Education; Preschool Education; *Teacher Attitudes; Teacher Characteristics; *Teacher Education; *Teacher Education Programs; Teacher Qualifications; Teaching (Occupation); Teaching Methods

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ERIC/EECE News

Four New Digests from ERIC/EECE

- Helping Parents Prevent Lead Poisoning by Helen J. Binns and Omar Benton Ricks
  http://ericeece.org/pubs/digests/2002/binns02.html
- Instructional Models for Early Childhood Education by Susan L. Golbeck
  http://ericeece.org/pubs/digests/2002/golbeck02.html
- Recess in Elementary School: What Does the Research Say? by Olga S. Jarrett
  http://ericeece.org/pubs/digests/2002/jarrett02.html
- Student Mobility and Academic Achievement by Russell W. Rumberger
  http://ericeece.org/pubs/digests/2002/rumberger02.html

Several Additional Digests Have Been Translated into Spanish. To see the list of all Spanish Digests published by ERIC/EECE, visit the Spanish Digests page at: http://ericeece.org/pubs/digests/spanish.html

Parent News Offline (Fall 2002) Now Available

In this issue:
How one middle school coordinates parent involvement, how you can get a teen who doesn't like to read interested in books, and more!

http://npin.org/pnews/pnewsoffline/fall02.html
http://npin.org/pnews/pnewsoffline/fall02.pdf

NPIN's *Violence Prevention Resource Guide for Parents* in Its Second Printing

Parents, teachers, and family support professionals are ordering this useful publication, and bulk orders continue to come in from school districts, family support organizations, universities, police associations, and state agencies. View the table of contents, read samples, and get ordering information at

http://npin.org/ivpaguide/

National Child Care Information Center's (NCCIC) New Online Library

A new Online Library has been added to the Web site of the National Child Care Information Center (NCCIC), ERIC/EECE's Adjunct ERIC Clearinghouse on Child Care. This growing Online Library is a collection of resources on child care that are available in full text. To find items in the library, users can select a pre-set search on a frequently requested topic, or they can search the collection by author, title, or keyword. The NCCIC Web site and its Online Library are available at

http://nccic.org/
http://128.174.128.220/cgi-bin/nccic/searchnccic.cgi

Contribute Your Perspective to Our New Online Forum

The Connecting with Parents Forum, sponsored by the W. K. Kellogg Foundation and the University of Illinois at Urbana-Champaign, explores issues related to communicating with parents about getting children ready to succeed in school. Weigh in on the latest questions or suggest new ones at

http://npin.org/connecting/forum.html

These news items were excerpted from *In the Loop*, an e-newsletter sent out periodically from the ERIC Clearinghouse on Elementary and Early Childhood Education. If you have any comments or questions, please contact Dianne Rothenberg at rothenbc@uiuc.edu.

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